

# THOMSON

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# 21DK24U

MODEL

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## SERVICE MANUAL

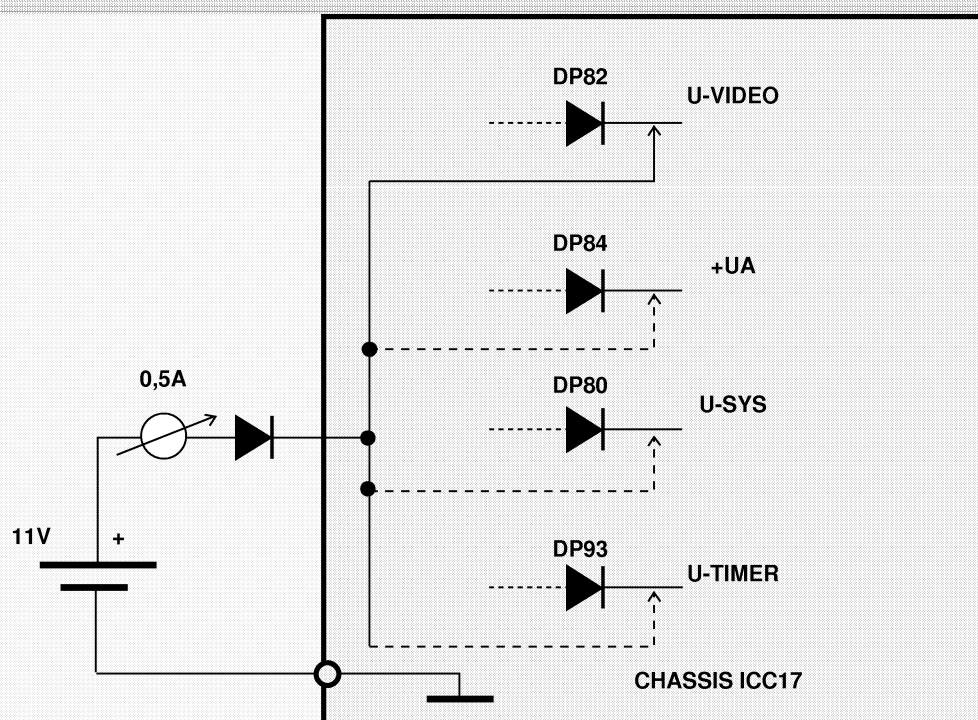
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## SECONDARY DC-VOLTAGES

*All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.*

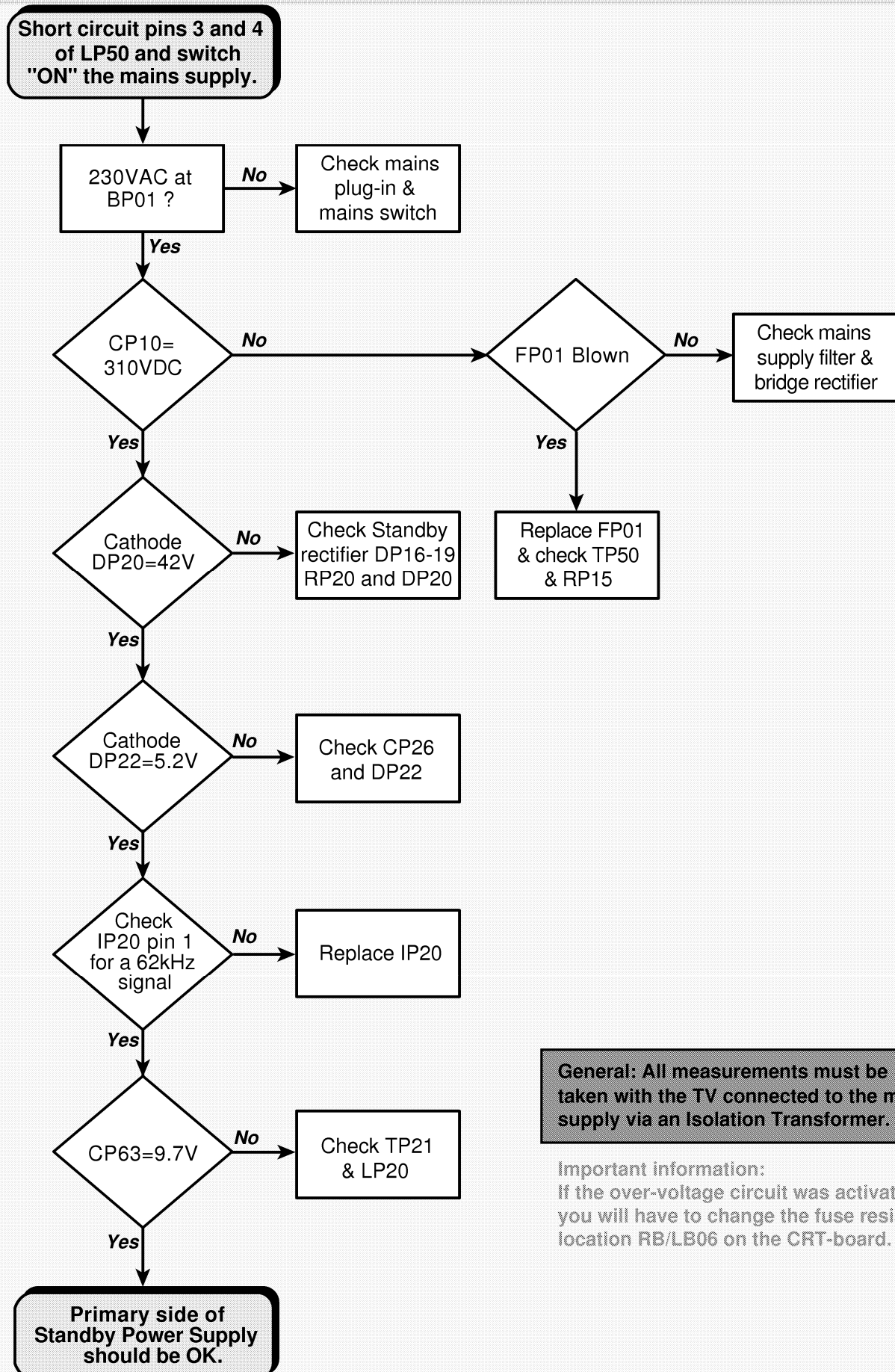
*Test circuit:*

*The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.*

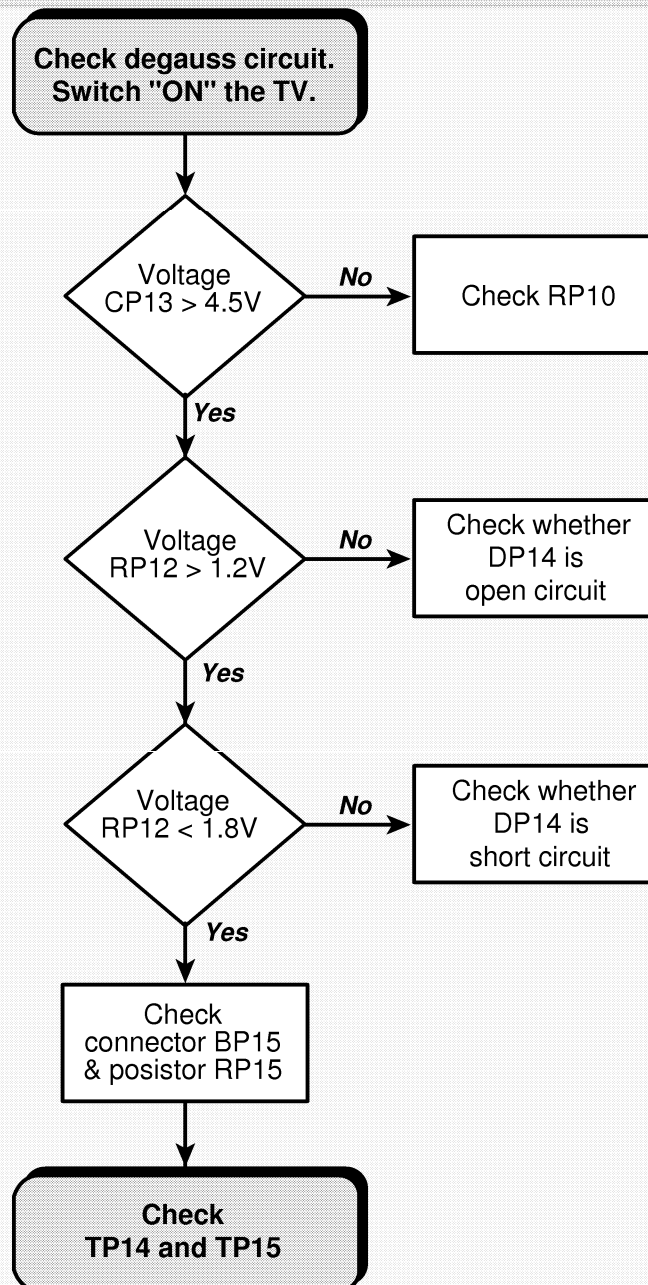




## STANDBY POWER SUPPLY - PRIMARY SIDE



## DEGAUSSING CIRCUIT



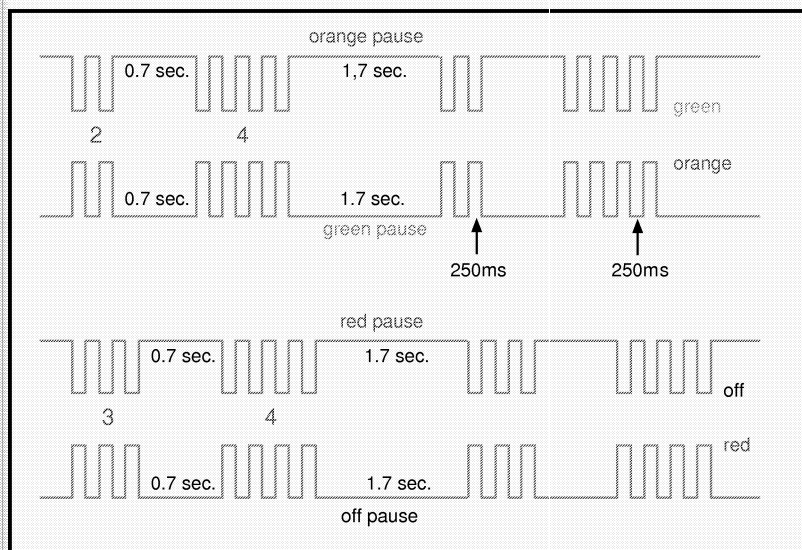
## GENERAL INFORMATION - LED BEHAVIOUR

### LED FLASHES

Error message transmission.

The error codes are signalled by the TV's red LED .

Count the number of flashes : the error code is two burst separated by a pause of 0.7 sec. and repeated four times. There is 1.7 sec between each codes sequence.

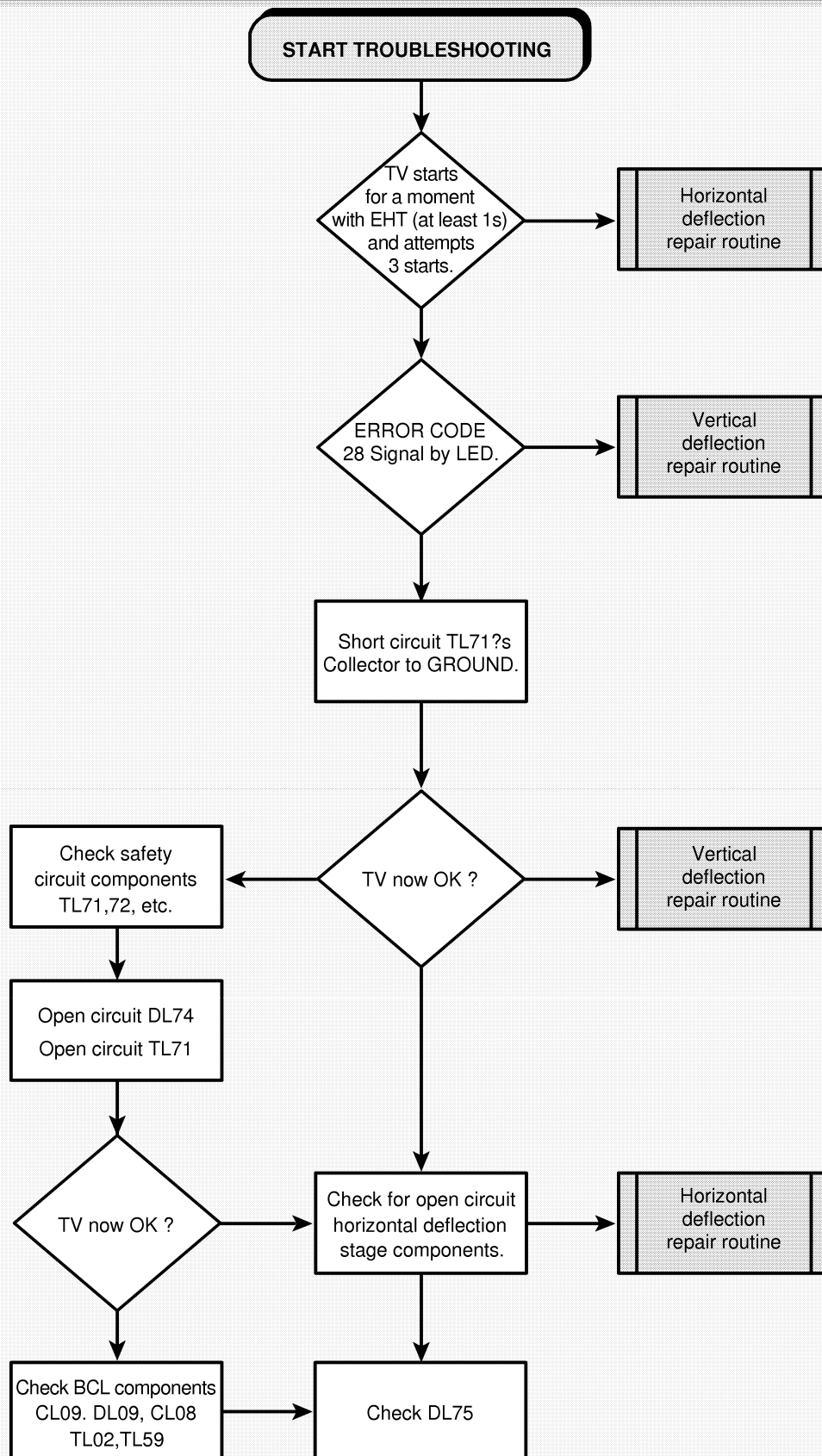


Currently all ICC17 TV sets are fitted with a Bicoloured LED, the red part is the Standby LED whilst, the green part is directly connected to the switched +8V supply. Therefore, the colour of the LED will depend upon the state of this voltage, the chart below gives the corresponding LED-colours:

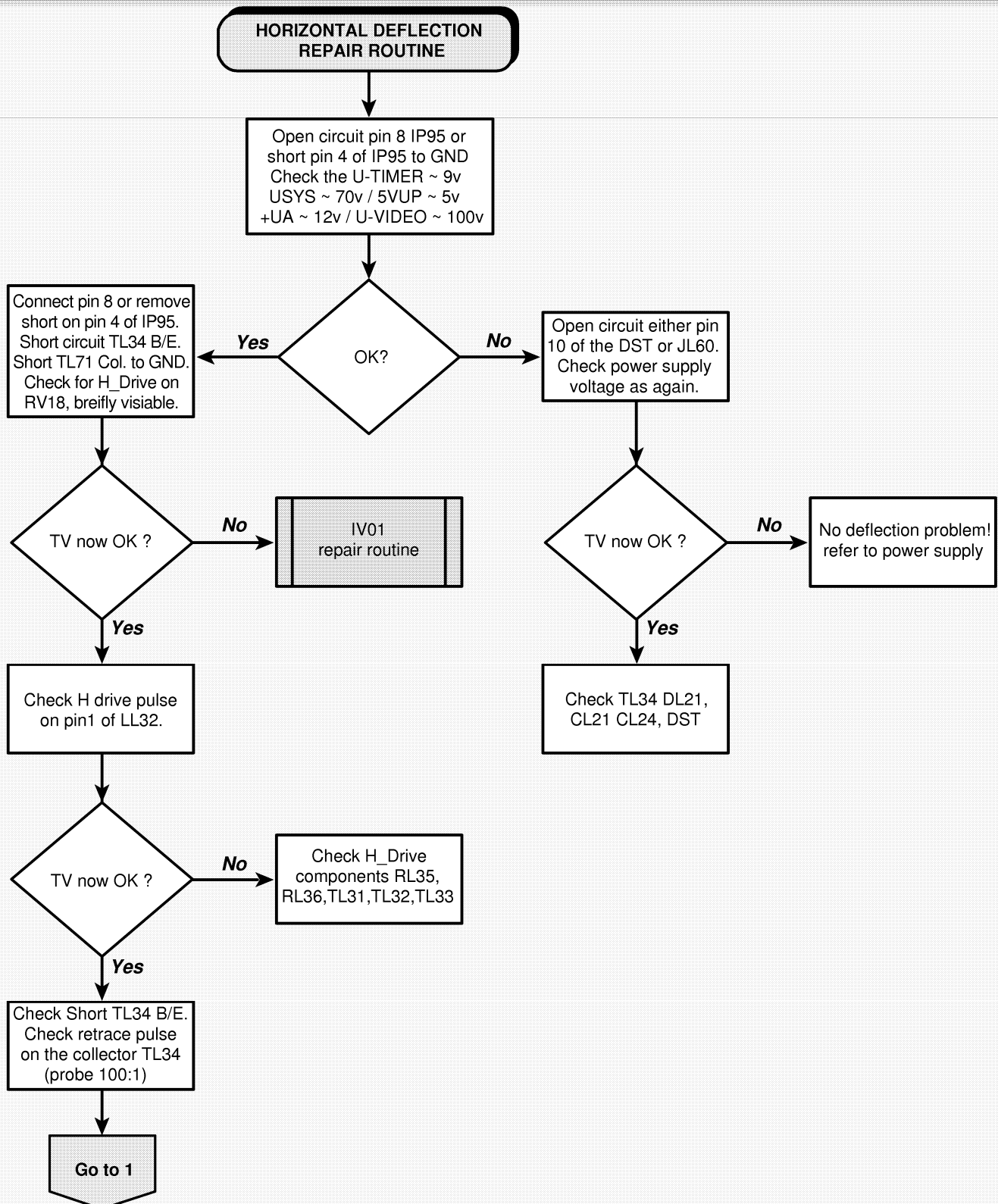
	LED-port	
	off	on
switched +8 V	off	on
on	green	orange
off	off	red

CODES	DEFAULTS
12	AUDIO-DPL DOES NOT ANSWER
14	TDA8855H DOES NOT ANSWER
15	AUDIO-MSP PROCESSOR NO LONGER RESPONDING
19	TUNER DOES NOT ANSWER
21	SDA LINE BEING HELD LOW
23	CLOCK HELD AT LOW LEVEL, SCL LINE HELD AT A LOW LEVEL
25	SWITCHED 5V NOT AVAILABLE
26	TUBE DOES NOT GET WARM IN TIME
27	THE DEFLECTION STAGE HAS DETECTED A FAULT ON MORE THAN THREE OCCASIONS
28	TDA VERTICAL GUARD VOLTAGE EXCEEDED
29	TDA HORIZONTAL GUARD VOLTAGE EXCEEDED
31	INTERNAL SOFTWARE ERROR
32	A SOFTWARE-TIMER HAS BEEN REQUESTED, BUT IS NOT YET AVAILABLE
34	THE NVM CHIP DOES NOT ANSWER
35	+13V IS NOT AVAILABLE
36	WRONG NVRAM ADDRESS PASSED TO THE BUS - HANDLER
37	UNEXPECTED LEVEL ON NMI (INTERRUPT) LINE FOUND (POSSIBLE CAUSE : TUBE FLASHOVER)
38	HEAP FULL
41	BUS (DATA LINE) NOT RECOVERABLE

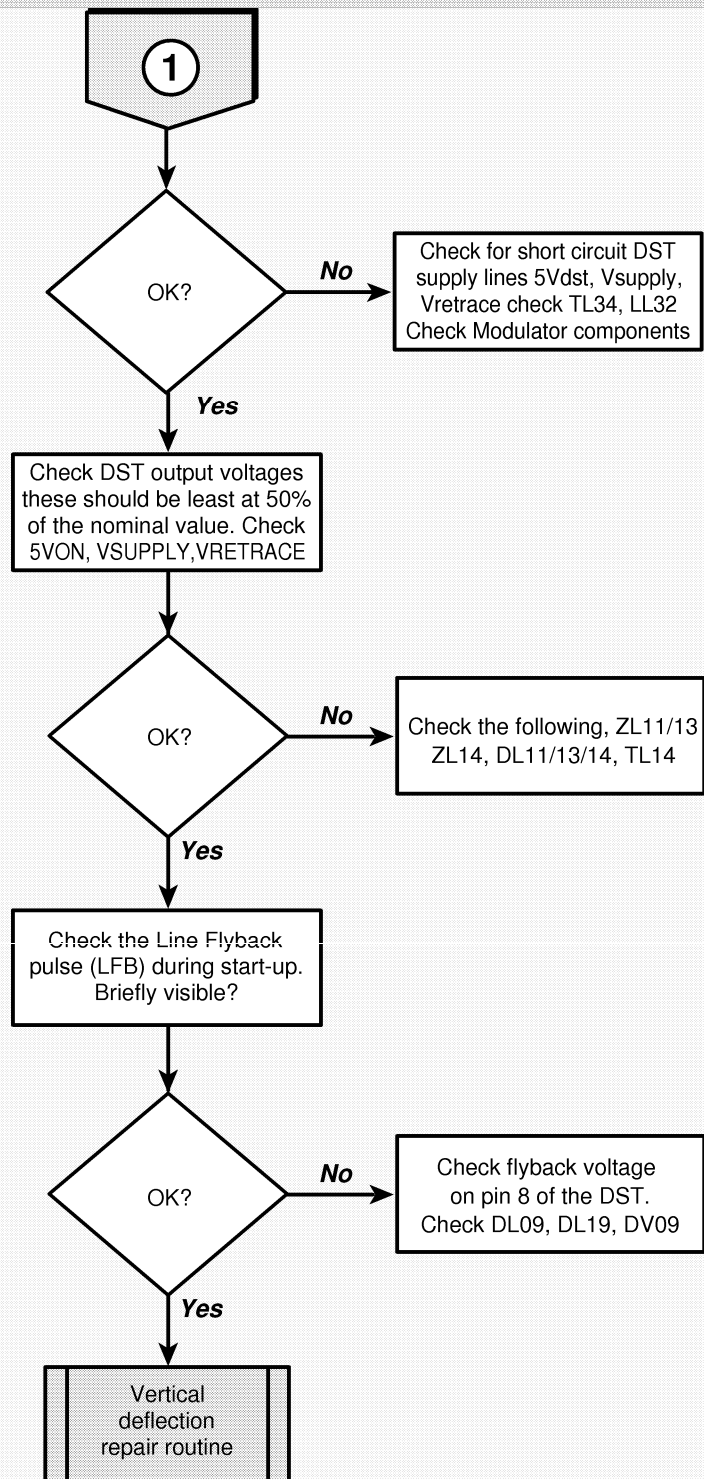
## DEFLECTION CIRCUIT CHECK



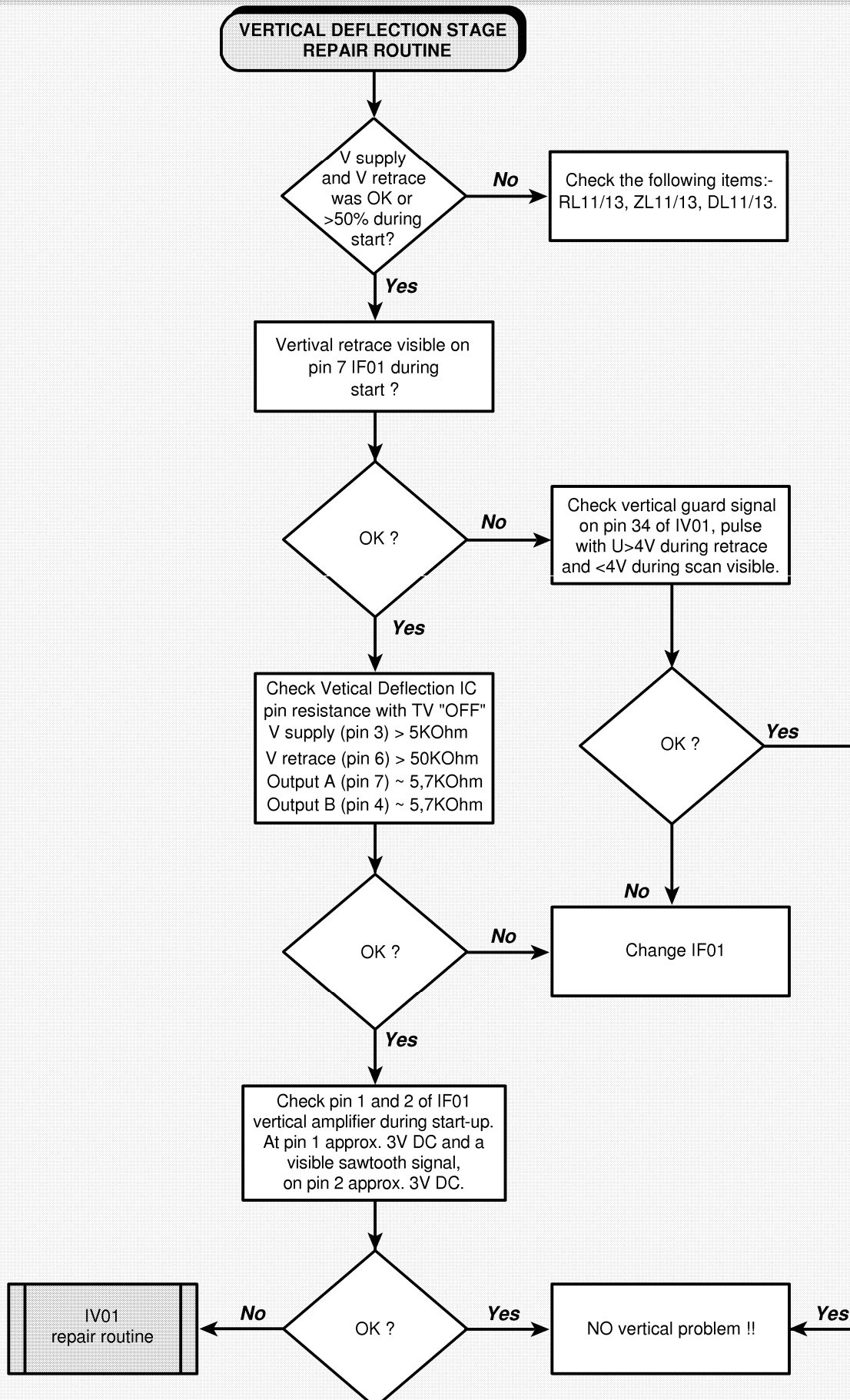
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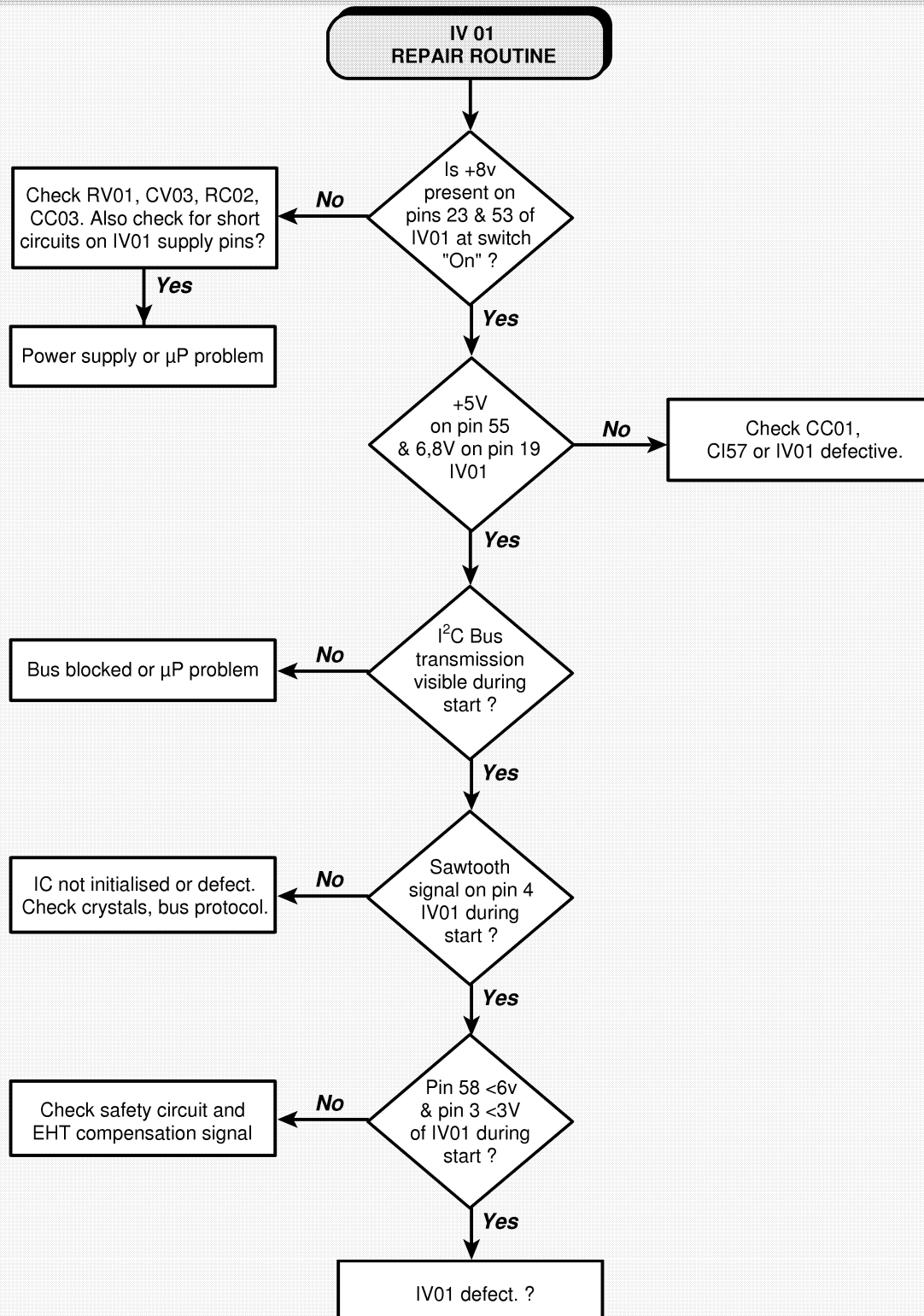
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## DEFLECTION CIRCUIT CHECK

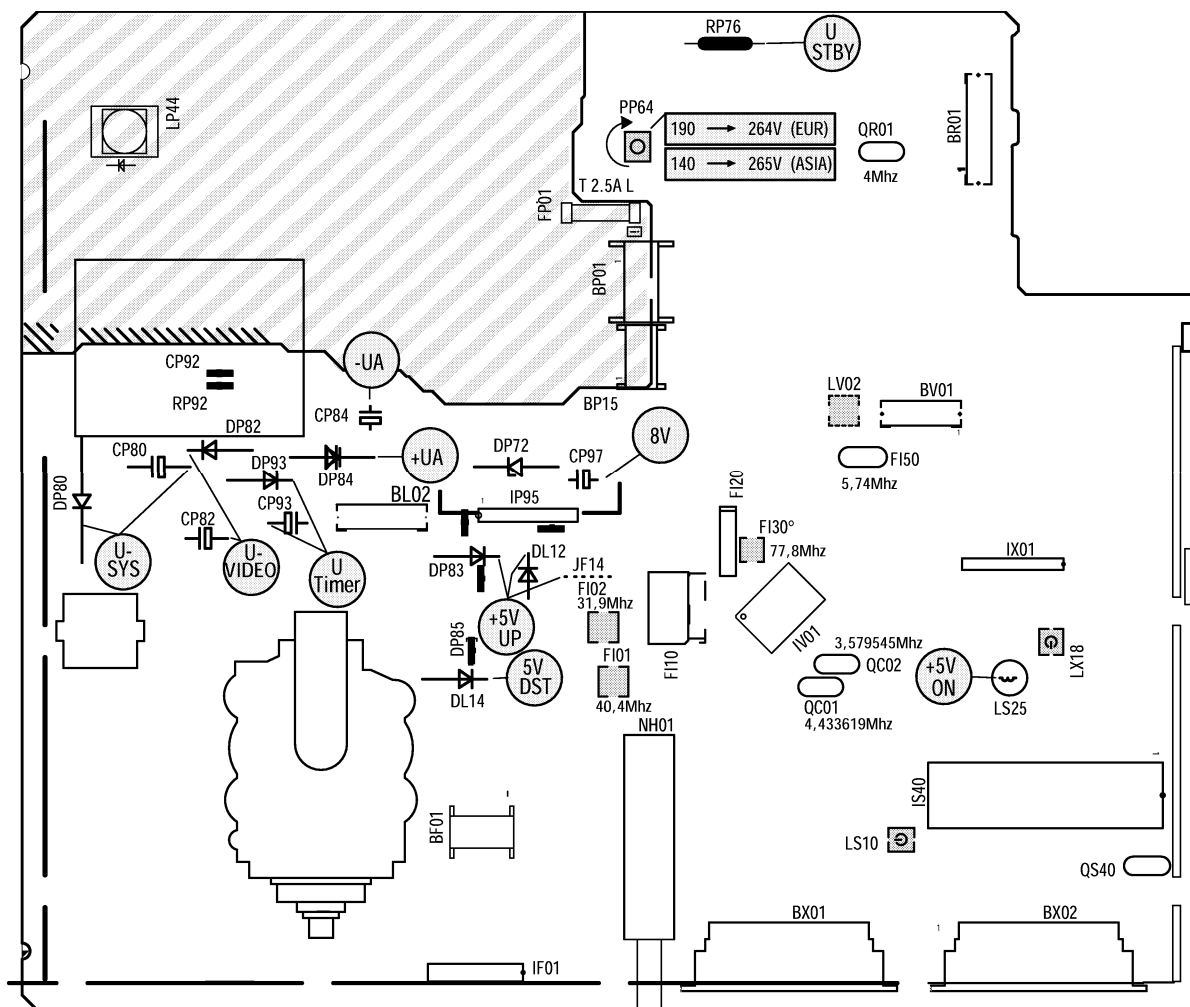


## DEFLECTION CIRCUIT CHECK

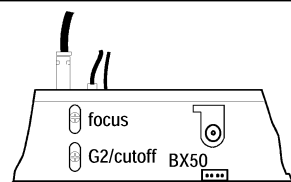




**LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES -  
SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO -  
SITUACIÓN DE LOS AJUSTES**



- it is not necessary , to adjust FI30 by after sales


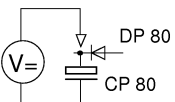
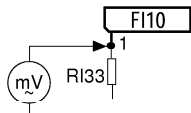
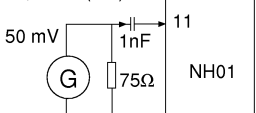
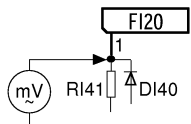

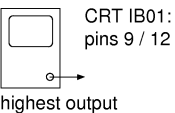
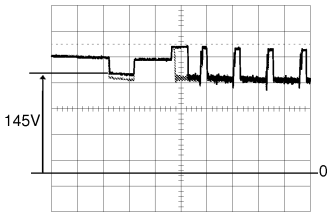




Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectada a la red.



Use isolating mains transformer -  
Utiliser un transformateur isolateur du secteur -  
Trenntrafo verwenden -  
Utilizar un transformador aislador de red -  
Utilizzare un trasformatore per isolarvi dalla rete

# ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64	 = 50% TV to AV1 : Black test pattern		<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr> <td>A51EBV13X01</td><td>4:3</td><td>128V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X70</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X99</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EBV13X01	4:3	128V+/-0,5V	JL80	4k7	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGD048X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X70	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X99	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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iF Alignment Alignement FI	trap 40.4Mhz FI 01	Switch set to standard BG Commuter le TV au standard BG  iF Signal 40,4MHz (BG) 31,9MHz (BG)		Adjust FI01 for minimum value at 40,4Mhz																																																																						
	trap 31.9Mhz FI 02			Adjust FI02 for minimum value at 31,9Mhz																																																																						
U G2 / cutoff	SCREEN	 = 50% AV (no Signal, black screen)																																																																								
FOCUS	FOCUS LL05	 Test pattern (standard values)		Sharp picture																																																																						

## MODO SERVICIO

### I - ENTRADA/SALIDA MODO SERVICIO

#### 1 ACCESO AL MODO SERVICIO

##### Acceso con panel control TV

- Con el mando a distancia conectar a STANDBY el televisor.
- Desconectar el aparato con el interruptor de la red (esperar hasta que el LED se apague).
- Pulse los botones **PR** - y **VOL** - y sin soltarlos, pulse la tecla **MARCHA/PAUSA**.
- Libere los botones **PR** - y **VOL** - (RS).

Soft Ver.: V1.00.0 0080  
Config.: A5---N  
Serial No.: 103465071

▶ QUIT  
TUBE  
SETUP  
GEOMETRY  
VIDEO  
IF

#### Nota :

En modo servicio:

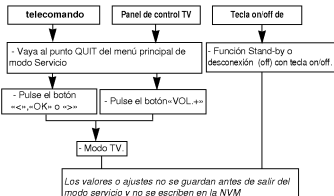
- Se ignora la función de bloqueo y se inicializa la función "cerradura niños".
- Anula todas las horas programadas.
- La pantalla de SCART es ignorada.
- La detección WSS AV Link, EPG, y Teletext son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste, color y brillo son puestos a los valores de fábrica.
- la nitidez es puesta al punto medio.
- La expansión de contrast al nivel bajo.
- Modo instalación es desactivado.
- Zoom y formato ignorados.

#### 2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia.
- Con el botón Menu puede acceder al menú de uso cotidiano.

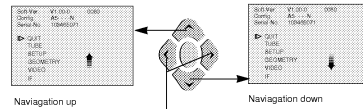
- Puede entrar al Menú Servicio con el botón azul.

#### 3 SALIDA DEL MODO SERVICIO



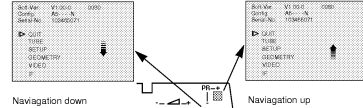
## II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

### 1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



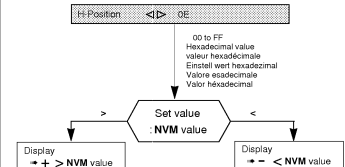
- Select option
  - Option auswählen
  - Selezionare l'opzione
  - Seleccionar opción
- "Change" value  
"Wert" finden  
"Cambiare" valore  
"Cambiar" valor

### 2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE



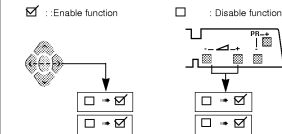
- Select option
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### 3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL. WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZZAZIONE DEL VALOR DE AJUSTE



### 4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCIÓN CONMUTACION

To enable a function check ☒ the box.  
Pour valider une fonction cocher ☒ la case correspondante.  
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (anzukreuzen).  
Per implementare una funzione d' verifica, (verificare) ☒ la casella.  
Para poner en funcionamiento una función verifique (señale) ☒ la casilla.



### 5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZARE I VALORI - VALORES ALMACENADOS EN LA MEMORIA

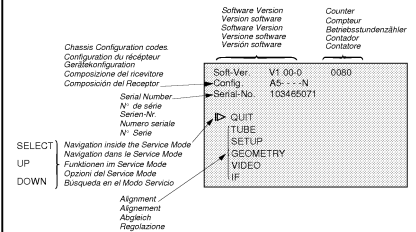
After setting, the values are stored in NVM.  
Après réglage les valeurs sont mémorisées en NVM.  
Nach dem Einstellen werden die Werte im NVM gespeichert.  
Dopo la regolazione i valori vengono memorizzati in NVM.  
Después del ajuste, los valores son almacenados en NVM.

The box ☐ becomes ☒.  
During alignment, values are temporarily stored in RAM.  
En cours d'alignement les valeurs sont mémorisées temporairement en RAM.  
Während des Abgleichs werden die Werte vorübergehend in RAM gespeichert.  
Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM.  
Durante el ajuste, los valores son almacenados temporalmente en RAM.

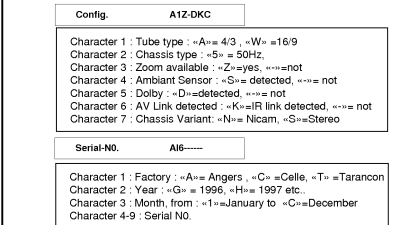
- Store** ➡ Copies RAM values into NVM  
Copie la valeur RAM en NVM  
Kopieren des Werts von RAM nach NVM  
Copiare i valori RAM in NVM  
Copiar valores RAM en NVM
- Restore** ➡ Copies all values from NVM into RAM.  
Copie toutes les valeurs des données NVM en RAM  
Kopiert alle NVM-Datenwerte in den RAM  
Copiare tutti i valori da NVM sulla RAM  
Copiar todos los valores de NVM a RAM
- ROM Default** ➡ All the default values of a page in use are stored in RAM.  
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.  
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen.  
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM.  
Todos los valores por defecto de la página en curso están almacenados en RAM.

## III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

### 1 MAIN MENU - MENU PRINCIPAL



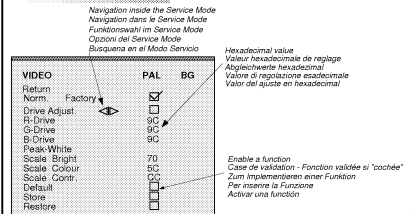
### TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV



### TIME COUNTER - COMPTeur DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.  
The counter indicates the number of hours of service of the TV. It counts from 0 to 65535 hours.  
The display is hexadecimal.  
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadecimal.  
Il contatore indica il numero di ore di servizio del TV. Può contare da 0 a 65535. La visualizzazione è esadecimale.  
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

### 2 SUBMENU - SOUS-MENU



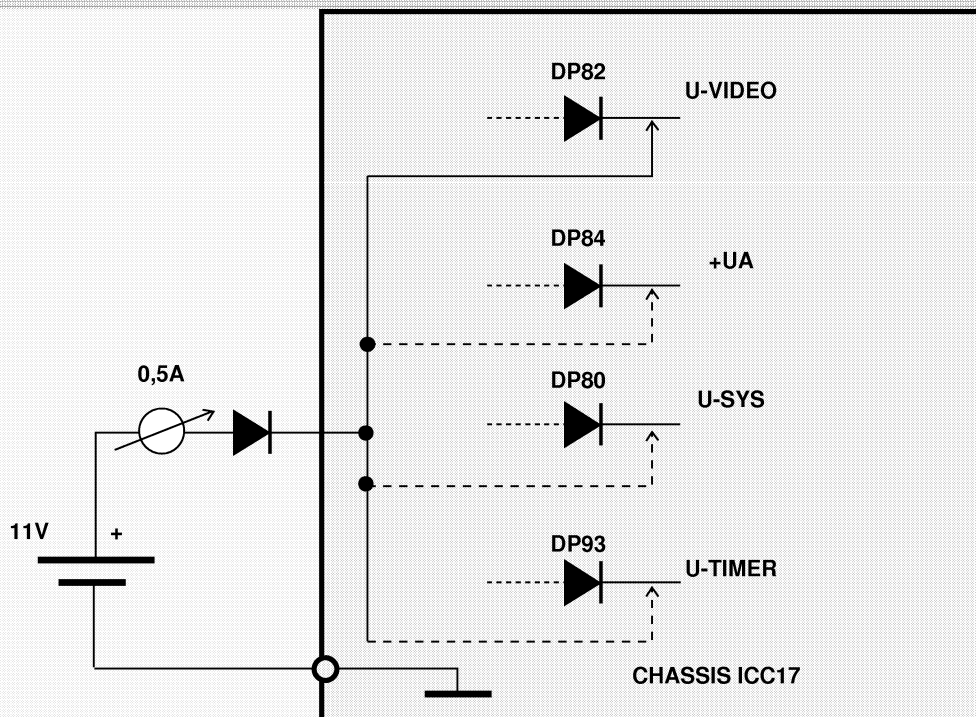


## SECONDARY DC-VOLTAGES

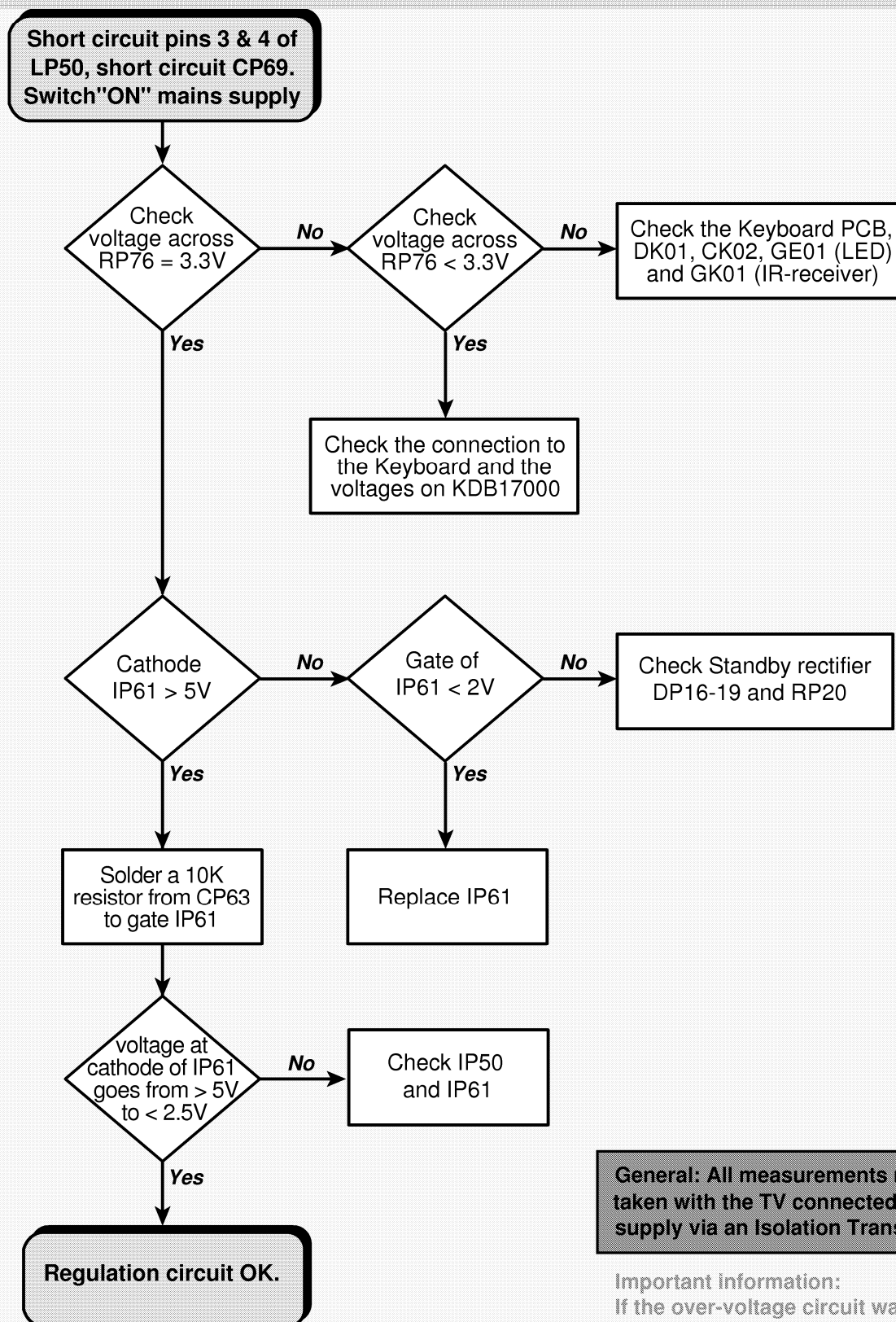
*All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.*

*Test circuit:*

*The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.*

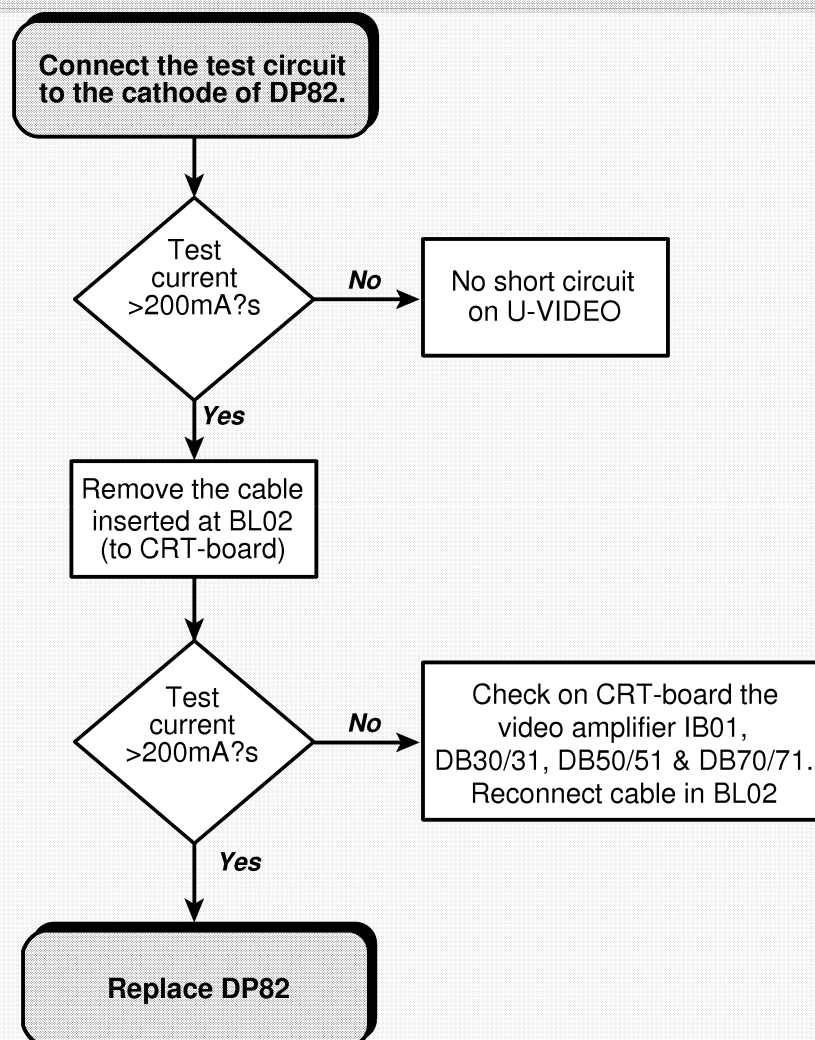


## STANDBY POWER SUPPLY - SECONDARY SIDE



After finishing this test, please remove the short circuits from pins 3/4 of LP50 and CP69 also remove the 10k resistor.

## POWER SUPPLY - SECONDARY SIDE : U-VIDEO

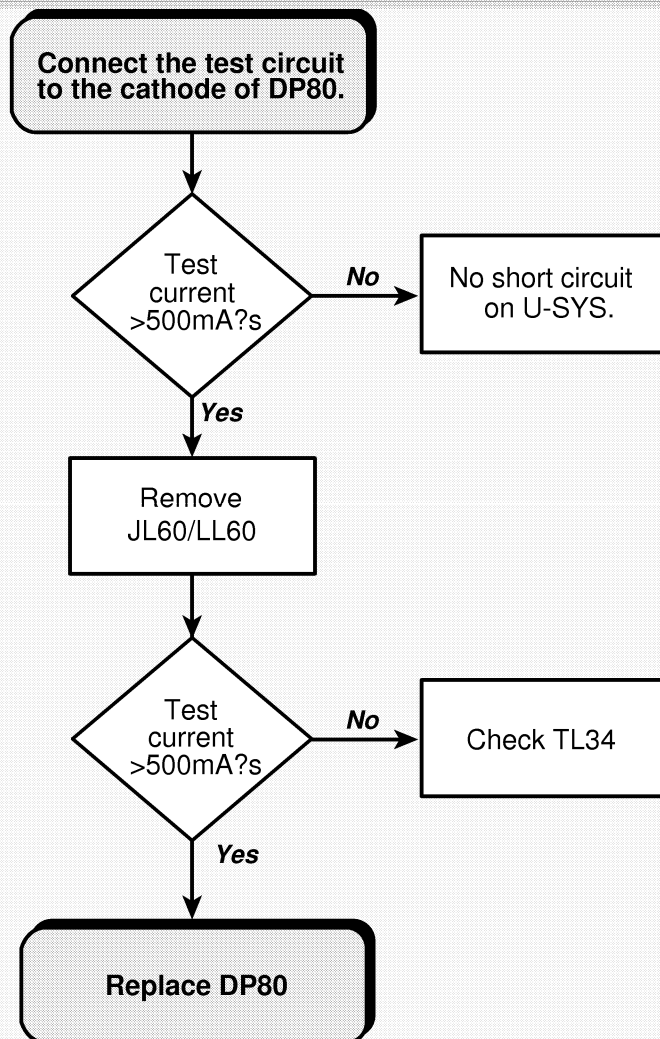


After finishing this test, please replace cable BL02 and remove the test circuit.

**General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.**

**Important information:**  
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

## POWER SUPPLY - SECONDARY SIDE : U-SYS



After finishing this test, please replace JL60/LL60 and remove the test circuit.

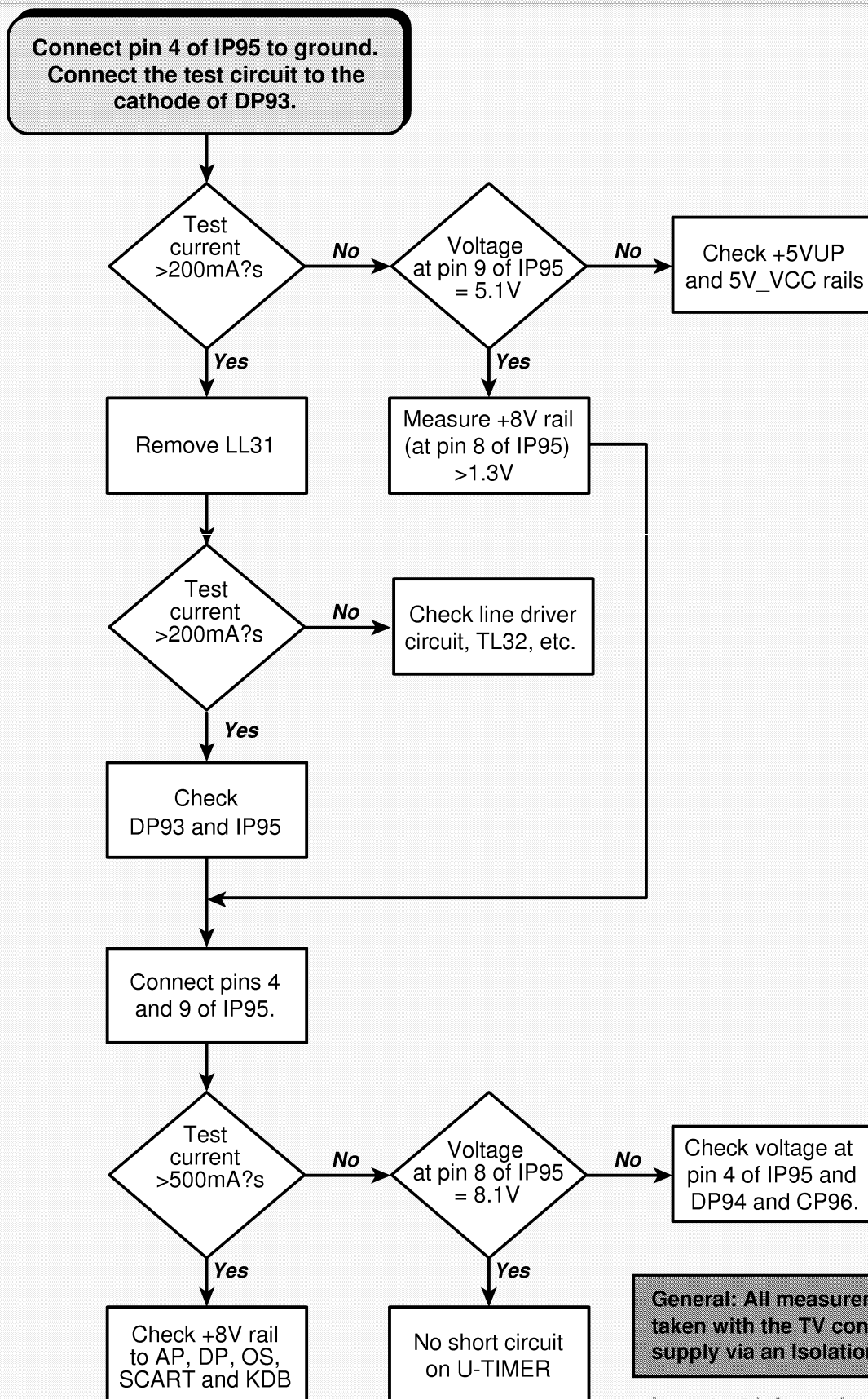
**General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.**

### Important information:

If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.



## POWER SUPPLY - SECONDARY SIDE : U-TIMER

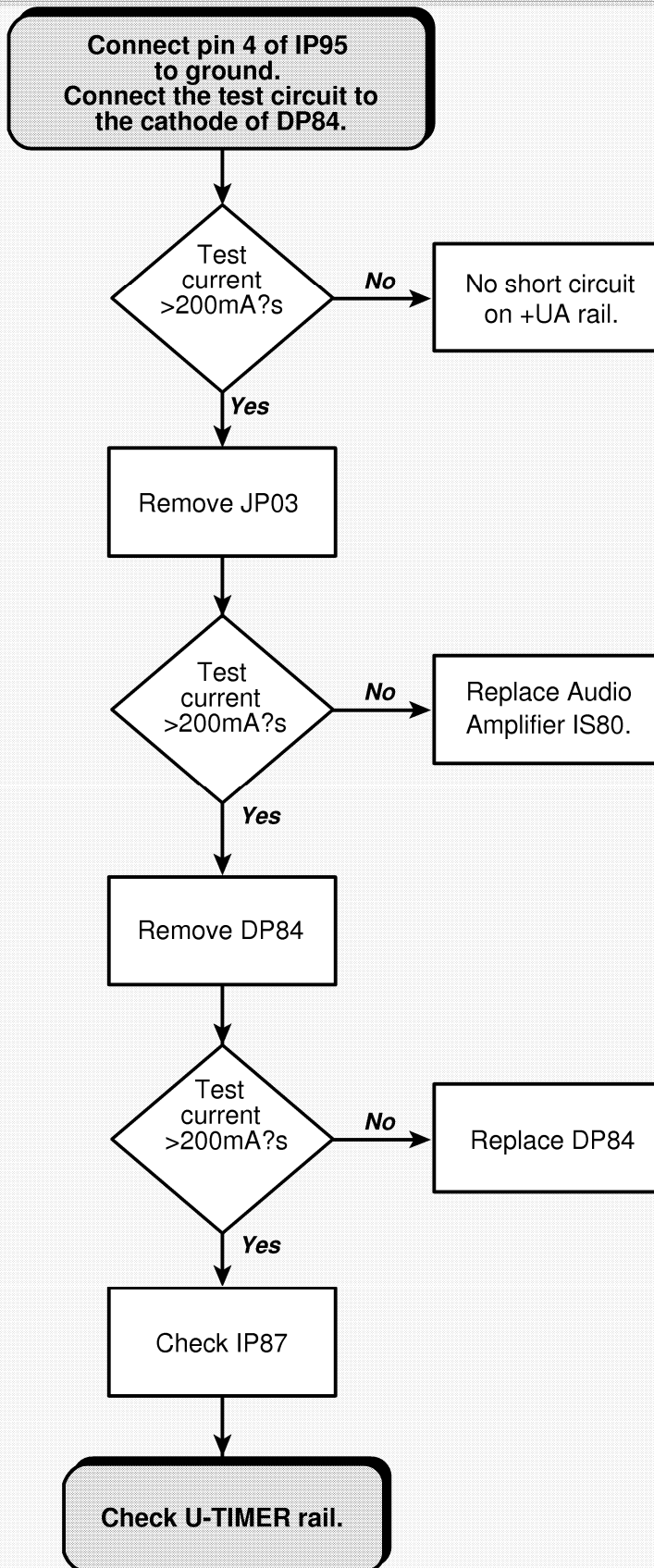


After finishing this test, please replace LL31, remove the link between pins 4 and 9 of IP95 and remove the test circuit.

### Important information:

If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

## POWER SUPPLY - SECONDARY SIDE : +UA



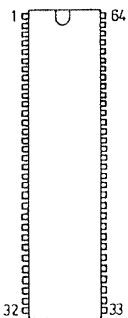
**General:** All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

**Important information:**  
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

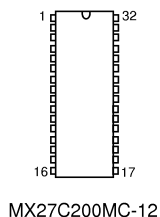
<p><b>LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN</b>  <b>LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES</b></p>
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● <b>+USYS:</b>	System voltage
● <b>+U_VIDEO:</b>	Video drive voltage for the CRT board
● <b>+ STDBY_ON:</b>	Standby data (0V standby , 0.6v switched ON)
● <b>+5V DST:</b>	5v unregulated voltage from the DST to supply the tuner and audio MSP device
● <b>+5V ON:</b>	5v regulated voltage from the DST to supply the tuner and audio MSP device
● <b>+5V UP :</b>	Microprocessor supply voltage
● <b>BCL:</b>	Beam current limiting information
● <b>CVBS:</b>	Composite video / luminance signal
● <b>CVBS_OUT:</b>	Composite video output
● <b>CVBS_TXT:</b>	Composite video for teletext extraction
● <b>DEGAUSS:</b>	Degauss signal
● <b>EW :</b>	East / West
● <b>FORMAT / BC:</b>	Full white control DATA depending on 16/9 selected format
● <b>HDRV:</b>	Horizontal deflection signal
● <b>HTR1 / HTR2:</b>	Heater voltage from the DST to CRT PCB
● <b>LFB:</b>	Line Fast Blanking
● <b>MUTE :</b>	Mutes audio amplifiers
● <b>PO:</b>	"Power ON " IP95 : reset activated and output = 8v "PO" = 5v when TV is working in normally
● <b>POWER_FAIL:</b>	Detection of mains supply and deflection stage failures
● <b>RESET:</b>	Microprocessor reset signal
● <b>SAFETY:</b>	Safety information from the deflection stage
● <b>SCL:</b>	Serial Clock
● <b>SDA :</b>	Serial Data
● <b>SIF:</b>	Sound IF
● <b>TRAP_INFO:</b>	31.4Mhz IF trap activation
● <b>U_STANDBY:</b>	Standby voltage
● <b>U_DRIVER:</b>	Horizontal sync signal from TDA8855H
● <b>U_TIMER:</b>	11v voltage used during "Switch ON " phase and "Wake Up" mode
● <b>V FLB:</b>	Vertical flyback reference for the microprocessor
● <b>V GUARD:</b>	Safety data generated by the vertical amplifier TDA 8351
● <b>V_RETRACE:</b>	42 / 48volts (depending on tube type) generated by the DST and used for vertical blanking
● <b>V_SUPPLY:</b>	13.5 to 15.5 volts (depending on tube type) generated by the DST

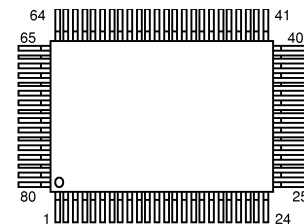
# INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES



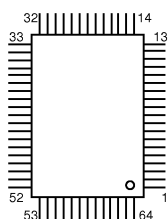
MPS3400C-PP-C6



MX27C200MC-12



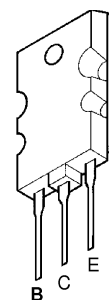
ST92R195



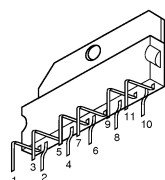
TDA8855H



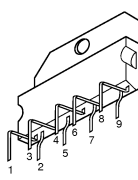
TDA8351



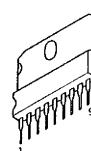
BUH516TH16



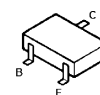
TDA7269



TDA6107Q



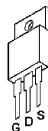
TDA 8139



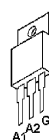
BC 847B  
 BC 857B  
 BCR141  
 BCR191  
 DTC113ZK  
 DTC144EK  
 TN1401



ST24C08-M  
 TS3702CD



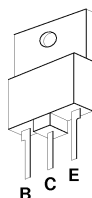
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337  
 BC 546B  
 BC 547B



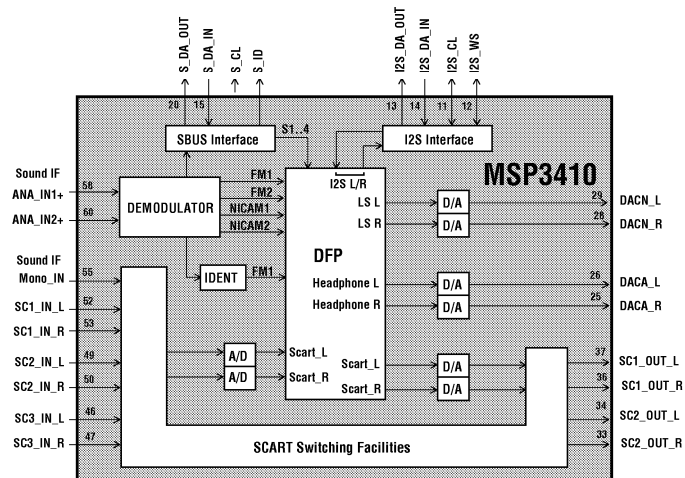
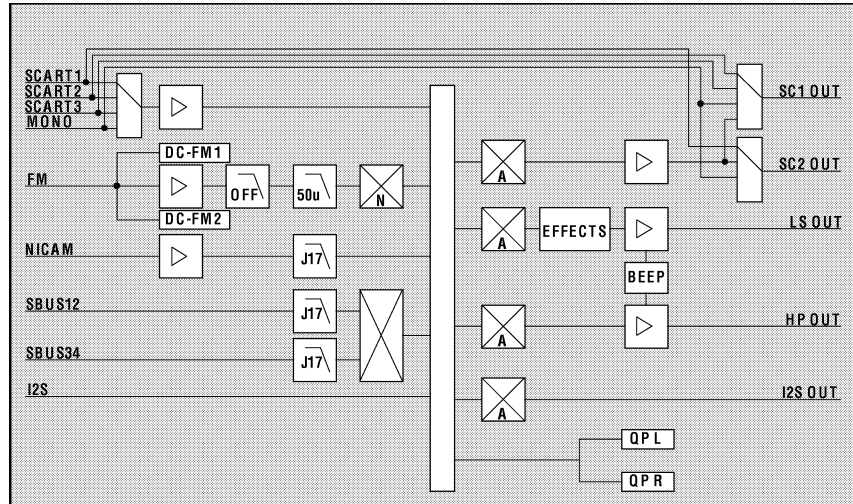
BF 422  
 BF423  
 2SA1020Y  
 2SC2236Y



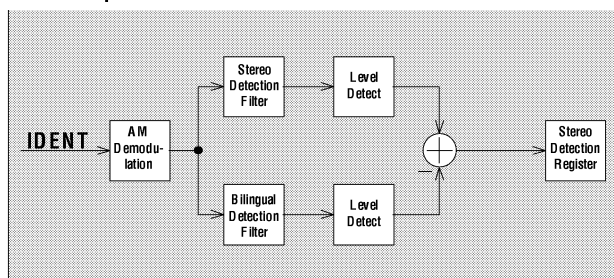
MPS750

# INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

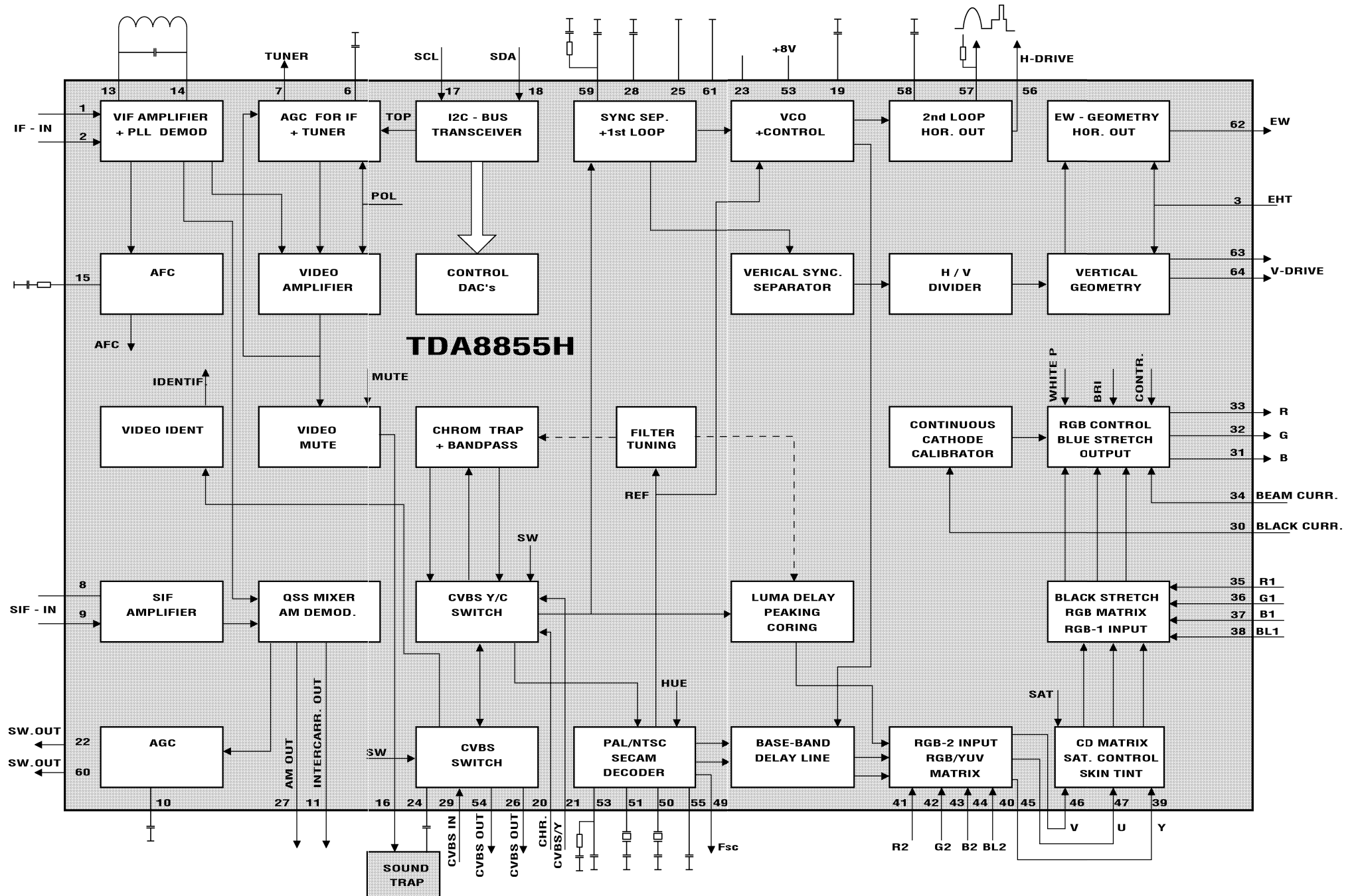
Audio baseband processing of the MSP3410



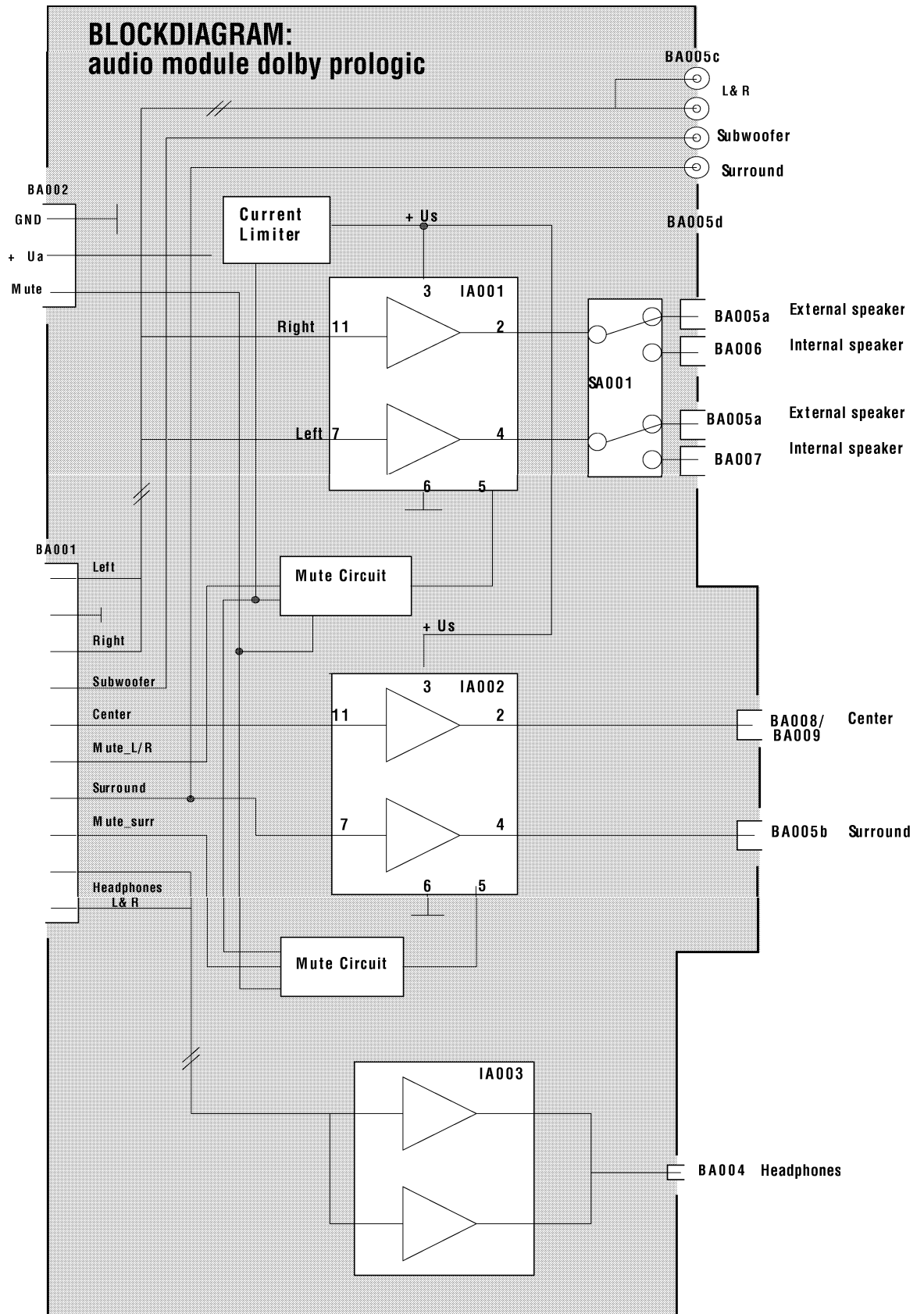
Detection part of the MSP 3410



## IV01 TDA 8855H

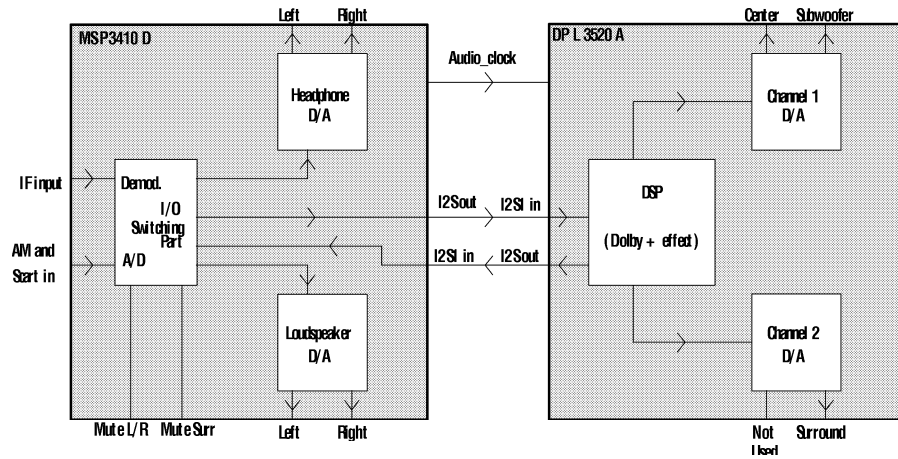


**BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)**  
**SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)**  
**BLOCKSCHALTBIID (AUDIO MODULE DOLBY PROLOGIC)**  
**SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)**  
**ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)**

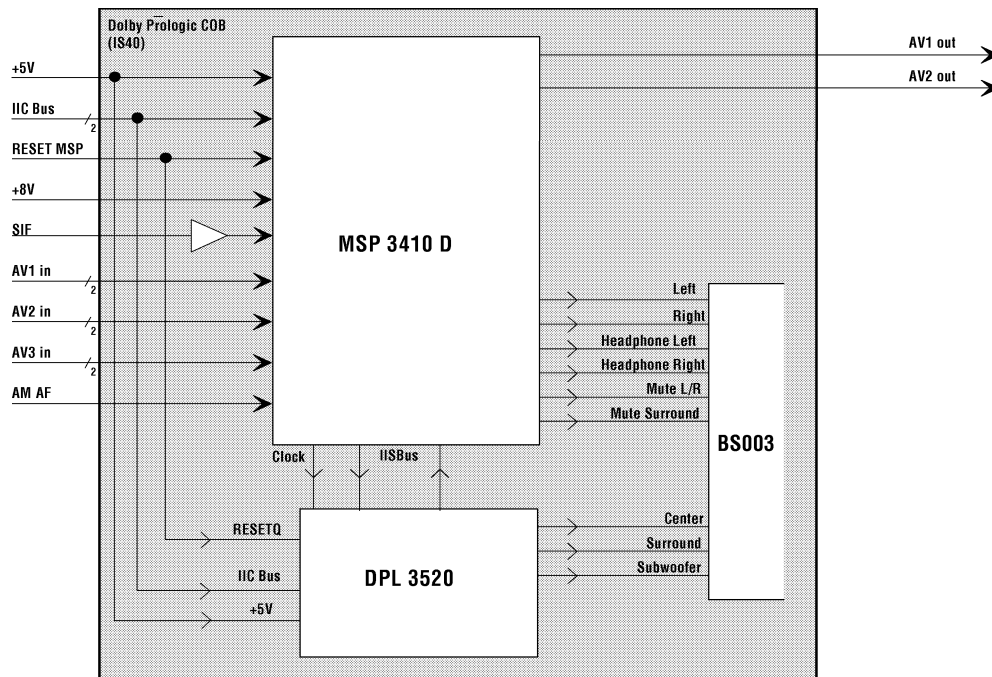




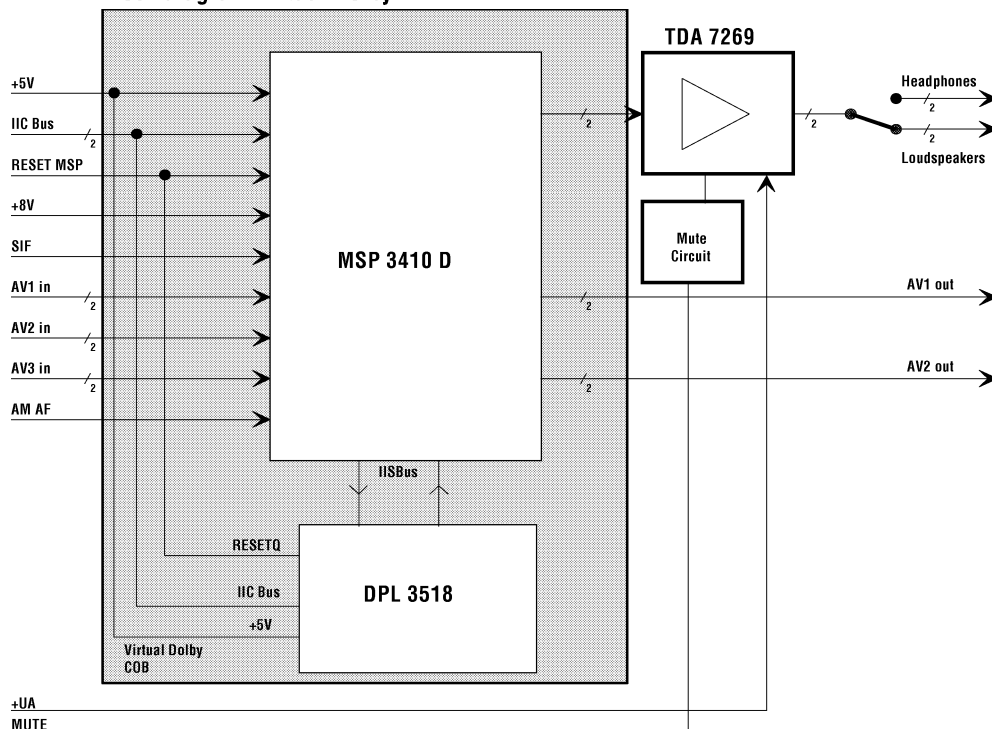
## Interface requirement audio part with Dolby Prologic



## Block diagram Dolby Prologic



## Block diagram Virtual Dolby







## EACEM - CÓDIGOS DE SECCIÓN

COMÚN	
ANT	SECCIÓN DE LA ANTENA
APR	PROCESADO DE SEÑALES (ANALÓGICO)
BCH	CARGA DE BATERÍA
CLK	SECCIÓN DE RELOJ
CPA	PROCESADO DE COLOR ANALÓGICO
CTR	PANEL DE CONTROL
DPR	PROCESADO DE SEÑALES (DIGITAL)
ERA	CIRCUITO DE BORRADO
FLX	PLACA FLEXIBLE
HFS	SECCIÓN DE ALTA FRECUENCIA
IDS	SECCIÓN DEL DISPLAY DE INFORMACIÓN
IFC	CIRCUITO FI
ILN	SECCIÓN i.LINK (IEEE1394)
INP	SECCIÓN DE ENTRADA DE SEÑALES
IRD	SECCIÓN INFRA-ROJOS (IRDA)
MEM	SECCIÓN DE MEMORIA
OUT	SECCIÓN DE SALIDA DE SEÑALES
PRG	SECCIÓN DE PROGRAMACIÓN
PRT	CIRCUITO DE PROTECCIÓN
PSU	ALIMENTACIÓN
PWA	SECCIÓN DEL AMP DE POTENCIA
REM	SECCIÓN DEL CONTROL REMOTO
RFU	AMPLIFICADOR/UNIDAD RF
SFT	SOFTWARE (CINTA/DISCO/ETC.)
SNS	UNIDAD DE DETECCIÓN
SVO	SECCIÓN DE SERVO
SYS	SECCIÓN DEL SISTEMA DE CONTROL
TUN	SECCIÓN DE SINTONIZACIÓN
TXT	PROCESADO DE TEXTOS
SONIDO	
APA	PROCESADO DE AUDIO ANALÓGICO
APD	PROCESADO DE AUDIO DIGITAL
CDC	SECCIÓN CAMBIADOR CD
CDS	SECCIÓN CD
MDC	SECCIÓN CAMBIADOR MD
MDS	SECCIÓN MINIDISC
MIC	SECCIÓN DE MICRÓFONO
PUD	DISPOSITIVO CAPTADOR
SHD	CABEZAS FIJAS
SPK	ALTAVOZ
IMAGEN	
CAM	CIRCUITO CÁMARA
CPD	PROCESADO DE COLOR DIGITAL
CRT	TUBO DE IMAGEN
DFL	CIRCUITO DE DEFLEXIÓN
DVD	SECCIÓN DVD
FPK	CONJUNTO DE ENFOQUE
IMG	UNIDAD DE VISUALIZACIÓN DE IMÁGENES

IMAGEN	
LCD	SECCIÓN LCD
LMP	SECCIÓN FLASH/LÁMPARA
VPA	PROCESADO DE VIDEO ANALÓGICO
VPD	PROCESADO DE VIDEO DIGITAL
VWF	VISOR
PC	
FDD	EXCITADOR DEL FLOPPY DISC
FMW	PROGRAMACIÓN FIJA
HDD	EXCITADOR DEL DISCO DURO
ISA	SECCIÓN ISA
JST	JOYSTICK
KBD	TECLADO
MDM	SECCIÓN MODEM
NIF	RED DE INTERCONEXIÓN
PAR	PUERTA PARALELO
PCC	TARJETA PC
PCI	SECCIÓN PCI
SCS	PUERTA SCSI
SER	PUERTA SERIE
USB	PUERTA USB
MECÁNICO	
ARM	MECANISMO DEL BRAZO
BZL	BEZEL (MUEBLE FRONTAL)
CBT	MUEBLE
CHA	CHASIS
DDM	SECCIÓN DE ACCIONAMIENTO DEL DISCO
EXC	CONECTOR EXTERNO
HCM	MECANISMO DE SOPORTE DE LA CABEZA
HOL	SOPORTE DE CASSETTE
INC	CONECTOR INTERNO
LDG	MECANISMO DE CARGA
LNM	MECANISMO DE LENTE
PFM	MECANISMO DE ALIMENTACIÓN DEL PAPEL
PIN	RODILLO/PALANCA DE APRIETE
PRI	BLOQUE DE IMPRESOR
RFM	MECANISMO DE ALIMENTACIÓN DE LA CINTA
RHD	CABEZAS ROTATIVAS
SLD	MECANISMO DE SEGUIMIENTO
SRS	SECCIÓN DEL CARRETE DE SUMINISTRO
STA	BLOQUE ESTÁTICO
TDM	MECANISMO DE ACCIONAMIENTO DE LA CINTA
THR	MECANISMO DE ENHEBRADO
TNR	REGULADOR DE LA TENSIÓN DE LA CINTA
TPT	CAMINO DE LA CINTA
TRS	SECCIÓN DEL CARRETE DE RECOGIDA
WIR	CABLE
XXX	PIEZAS ESTÉTICAS

CÓDIGOS DE LOS DEFECTOS	
MECÁNICO	
A	GASTADO (O DEFECTO MECÁNICO EN GENERAL)
A1	ERROR DE FUNCIONAMIENTO
B	ENSUCIADO/MANCHADO
C	DESAJUSTADO MECÁNICAMENTE
D	CORTADO/DEFECTUOSO
E	DESFORMADO
F	ENGANCHADO/BLOQUEADO
G	RAYADO/ABOLLADO/BORDES CORTANTES
H	HENDIDURA/PELADO/CORROIDO/FUNDIDO
I	SEPARADO/SUELTO/RAYADO
J	INESTABILIDAD
K	PÉRDIDA (MECÁNICA)
L	SECO (SIN LUBRIFICANTE)
M	CUERPO EXTRAÑO
ELÉCTRICO	
N	COMPONENTE ELÉCTRICO/MÓDULO DEFECTUOSO
O	QUEMADO/FORMACIÓN DE ARCO/PIXELS QUE FALTAN
P	MAL AJUSTADO ELÉCTRICAMENTE/MAL AJUSTADO
Q	CORTOCIRCUITO
R	CIRCUITO ABIERTO
S	FUGA (ELÉCTRICA)
T	MAL CONTACTO/SOLDADURA
T1	MALA CONEXIÓN A TIERRA
U	CIRCUITO ABIERTO
V	PLACA HENDIDA
W	SOLDADURA SECA O QUE FALTA
X	SOLDADURA EN PUENTE
Y	MÓDULO/COMPONENTE EQUIVOCADO
Z	MÓDULO/COMPONENTE PERDIDO
1	PROBLEMA DE SOFTWARE
11	PÉRDIDA DE DATO DESDE LA MEMORIA
12	FALLO EN AJUSTE/INSTALACIÓN DE PROGRAMA
13	SOFTWARE DEFECTUOSO O INCOMPLETO
14	PROBLEMA DE AJUSTE DEL SOFTWARE
15	NO IDENTIFICA/VERIFICA EL PRODUCTO O EL USUARIO
2	AGOTADO/EMISIÓN DÉBIL
3	NO SE ENCUENTRA PROBLEMA (APARATO DENTRO DE ESPEC.)
4	NO SE ENCUENTRA PROBLEMA - EQUIVOCACIÓN DEL USUARIO
5	NO SE ENCUENTRA PROBLEMA - CONDICIONES LOCALES
51	FALLO EN LA TENSIÓN PRINCIPAL
6	IMPOSIBLE DIAGNOSTICAR FALLO
7	INCORRECTAMENTE CABLEADO/MONTADO
81	CONEXIÓN INCORRECTA DEL EQUIPO
9	MAL USO POR EL USUARIO
93	MODIFICACIÓN NO AUTORIZADA

CÓDIGOS DE REPARACIÓN	
A	SUBSTITUCIÓN
B	AJUSTE MECÁNICO
C	AJUSTE ELÉCTRICO
D	RESOLDADURA
D1	REPARACIÓN/RECOLOCAR EN SU SITIO (CONECTOR/TUBO/...)
E	LIMPIEZA
F	ENGRASE
G	COMPONENTES ELÉCTRICOS REPARADOS
H	COMPONENTES MECÁNICOS REPARADOS
I	MODIFICACIÓN SOLICITADA POR EL FABRICANTE
J	DESMONTADO
K	AÑADIDO
L	COMPROBACIÓN FUNCIONAL
M	MEDICIÓN DE ESPECIFICACIÓN
N	MANTENIMIENTO
O	REPULIR
P	SUBSTITUCIÓN PREVENTIVA DE COMPONENTES
Q	ACCIÓN PREVENTIVA SIN SUBSTITUCIÓN DE COMPONENTES
U	EXPLICACIÓN AÑADIDA
V	PRESUPUESTO RECHAZADO
W	PRESUPUESTO CON COMPONENTES
X	PRESUPUESTO SIN COMPONENTES
Y	VUELTO AL CLIENTE SIN REPARACIÓN
Z	CAMBIO DEL APARATO
Z1	CAMBIO DE PRODUCTO (REPARACIÓN MUY CARA)
Z2	CAMBIO DE PRODUCTO (MUCHAS VISITAS/REPARACIONES)
Z3	CAMBIO DE PRODUCTO (REPUESTO NO OBTENIBLE)
Z4	CAMBIO DE PRODUCTO (IMPOSIBLE DE REPARAR)
Z5	CAMBIO DE PRODUCTO (SOLICITADO AL DETALLISTA)
Z6	CAMBIO DE PRODUCTO (SOLICITADO POR EL FABRICANTE)
1	CORRECCIÓN DEL SOFTWARE/REAJUSTE
2	ACTUALIZACIÓN DEL SOFTWARE
3	PRODUCTO ACTUALIZADO (SOBRE PEDIDO)

EJEMPLO:																					
BANDEROLA	CÓDIGO DE SÍNTOMA	CÓDIGO DE REPUESTO										NÚMERO DE REFERENCIA		SECCIÓN	PLACA	CÓDIGO DE DEFECTO	CÓDIGO DE REPARACIÓN	CANTIDAD			
1	1 4 1 2 3 6 4 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 4 5 6 7 8 9 X X X X X X X X X X	R	1 2 3 . . . .	1 1 . . . .	T D M	Y A 2 2 . . . .	C 1	Z 1	. .										

# TECHNICAL INFORMATION

**Chassis concerned : ICC17 (25"MP & 28"MP)**

**Symptom/ Problem observed :**

Spare Parts List, component part number amendment.

**Solution implemented :**

To optimize the CRT heater supply voltage for the above mentioned tubes, both LL05(DST) and LB02 (coil) have been changed.

**LL05** : Old Part No. 10546610 ---> **New Part No. 10600190**

**LB02** : Old Part No. 10477930 ---> **New Part No. 25349470**

**Comment :**

Both components must be replaced at the same time.

# TECHNICAL INFORMATION

**Finished products / Chassis concerned :**  
**All TV sets equipped with ICC17 chassis (CRT Board)**

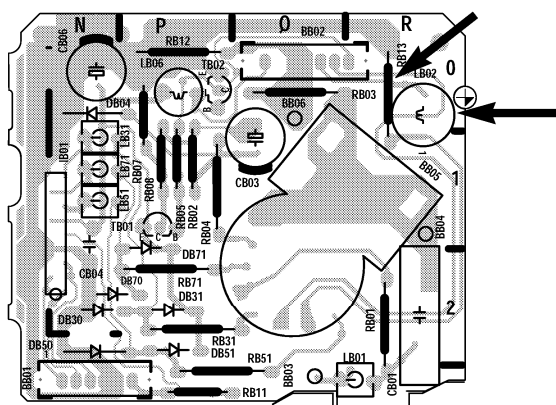
**Subject : Protection of transistor TB02 against arcing**

**Symptom/ Problem observed :**  
 Transistor type number BF422 used in position TB02 found defective.

**Cause :**  
 Arcing.

**Solution implemented :**

- Remove the resistor at location RB13.
- On the copper side of the CRT PCB, add an insulated wire link between pin 1 of inductor LB02 and pin 4 of the CRT socket (ground).



IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1 3 1 5			R B 1 3	V P A	Y	T

You do not need to write anything in the white boxes.

# TECHNICAL INFORMATION

## Chassis concerned : ICC17

### Symptom/ Problem observed :

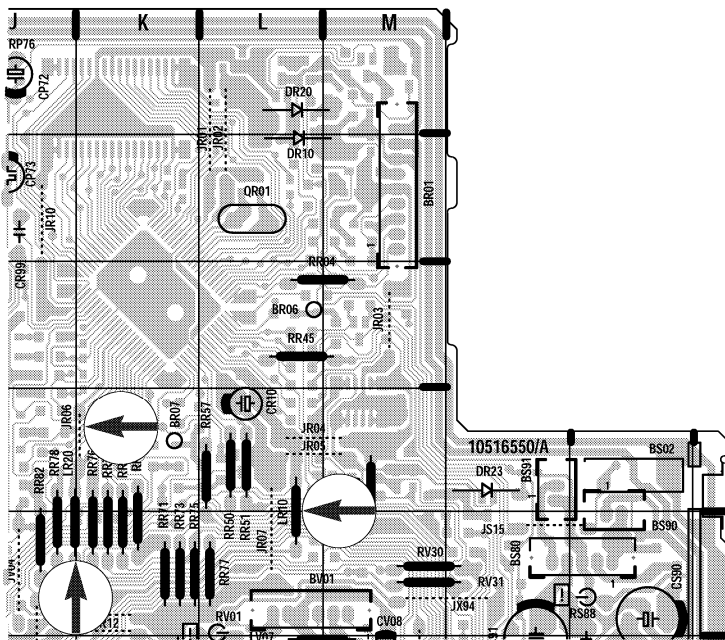
Moiré patterning visible on some channels.

### Cause :

High frequency cross modulation.

### Solution implemented

- Remove the jumper link at location JR06.
- Remove the inductor at location LR20.
- Replace LR10 10 $\mu$ H inductor with a jumper link.



# TECHNICAL INFORMATION

## Chassis concerned : ICC17

### Problem observed :

Different symptoms can be observed

- TV stuck in the Standby Mode with the safety mode active (code 27).
- Unstable OSD graphics.
- Sporadic or intermittent vertical scan.

### Cause :

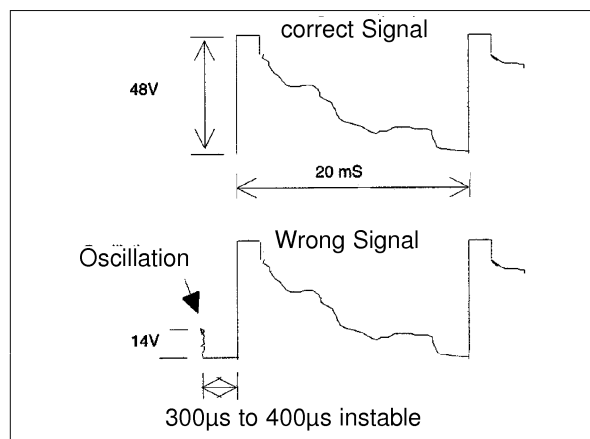
Parasitic oscillation at pin 7 of IF01 (see attached)

### Solution implemented :

The problem is still under investigation to identify the basic cause of the problem, but to initially overcome the problem we recommend changing the following components:

- Change RF08 from  $4.7\Omega$  or  $27\Omega$  to  $68\Omega \pm 5\%$  0.700w Part No. 15009050.
- Change CF08 from 100nF to 220nF 20% 63V Part No. 43302770.

If problem is still not resolved after changing the above mentioned resistors the replace IF01.



IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1 1 1 9	1 5 0 0 9 0 5 0	0 1	R F 0 8	D F L	Y	A
	4 3 3 0 2 7 7 0	0 1	C F 0 8	D F L	Y	A

You do not need to write anything in the white boxes.



# TECHNICAL INFORMATION

**Chassis concerned : ICC17 (with PCB index 02)**

**Problem observed :**

The TV will not come out the Standby Mode.

**Cause :**

When starting, the base drive current to TP50 is too low.

**Solution implemented :**

Change the diode in position DP39 (LL4148) to a resistor strap Part No. 41047950.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1119	41047950	01	DP39	PSU	Y	A

You do not need to write anything in the white boxes.

# TECHNICAL INFORMATION

## Chassis concerned : ICC17

### Problem observed :

At switch "ON", the TV's standby power supply does not work.

### Cause :

The reverse voltage of the diodes used in positions DP16/17/18/19 (1N4001) is too low especially when the mains voltage is at highest.

### Solution implemented :

Change the diodes used in positions DP16/17/18/19 with higher reverse breakdown voltage (400V) type number 1N4004, Part No. 44009009.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
<div>1119</div>	<div>44009009</div>	<div>01</div>	<div>DP16</div>	<div>PSU</div>	<div>Y</div>	<div>A</div>
<div></div>	<div>44009009</div>	<div>01</div>	<div>DP17</div>	<div>PSU</div>	<div>Y</div>	<div>A</div>
<div></div>	<div>44009009</div>	<div>01</div>	<div>DP18</div>	<div>PSU</div>	<div>Y</div>	<div>A</div>
<div></div>	<div>44009009</div>	<div>01</div>	<div>DP19</div>	<div>PSU</div>	<div>Y</div>	<div>A</div>

You do not need to write anything in the white boxes.



# TECHNICAL INFORMATION

**Chassis concerned : ICC17 (with PCB index 02)**

**Problem observed : .**

East/West correction circuit failure.

**Cause :**

The transistor used in position TL41 (BD241C) is damaged due to CRT flashover.

**Solution implemented :**

After replacement TL41, add a RGP10G protection diode in position DL41 in parallel with TL41 (cathode to the collector of TL41 and the anode to ground), Part No. 10459090.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
3335	10459090	01	DL41	DFL	Z	K

You do not need to write anything in the white boxes.



# TECHNICAL INFORMATION

**Chassis concerned : ICC17**

**Subject : Improvement of the reception with internal antenna**

**Problem observed :**

Moiré patterning, mainly visible on VHF channels.

**Cause:**

Inference being caused by the switch mode power supplies when using a set top aerial.

**Solution implemented :**

Change the value of capacitor CP49 from 1.5nF into 3.3nF 20% 1.6KV code 10607950.

Please change the following components in order to change the frequency of operation of the power as follows :

- Capacitor CP16/CP17 from 220nF to a 470nF 20% 275V Part No. 10596570.
- Capacitor CP41 from 10nF 63V to a 10nF 10% 100V Part No. 70427750.
- Resistor RP53 from 5.6k $\Omega$  to a 5.1k $\Omega$  5% 0.100W Part No. 30611700.
- Resistor RP56 from 10k $\Omega$  to a 2.2k $\Omega$  5% 0.100W Part No. 40077900.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1 2 2 4	1 0 6 0 7 9 5 0	0 1	C P 4 9	P S U	Y	A
	1 0 5 9 6 5 7 0	0 1	C P 1 6	P S U	Y	A
	1 0 5 9 6 5 7 0	0 1	C P 1 7	P S U	Y	A
	7 0 4 2 7 7 5 0	0 1	C P 4 1	P S U	Y	A
	3 0 6 1 1 7 0 0	0 1	R P 5 3	P S U	Y	A
	4 0 0 7 7 9 0 0	0 1	R P 5 6	P S U	Y	A

You do not need to write anything in the white boxes. ☐

# TECHNICAL INFORMATION

**Chassis concerned : ICC17**

**Problem observed :**

Visible flash over after quickly switch Off and On again.

**Solution implemented :**

Change the value of capacitor CI57 from 2.2μF to a 1μF 20% 100V, Part No. 256728.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1321	256728	01	CI57	APR	Y	A

You do not need to write anything in the white boxes.

## GENERAL INFORMATION

### METHODOLOGY

#### 1 - ON POWER-UP :

- Observe the behaviour of the two-coloured LED: note the various stages and compare them to the normal cycle.  
By doing this, the time at which the problem arose and the part of the circuit which needs to be investigated can be identified.

#### 2 -TROUBLE SHOOTING PROCEDURE: LED BEHAVIOUR

In certain cases the LED will flash when transmitting a message:

LED flashing : message being transmitted.

Count the flashes : code is two bursts separated by a pause of 0.7 s and repeated several times.

See the error code table.



**LIST OF LED MESSAGE  
ERROR CODES**

This data is more precise than colour changes but still incomplete, since various causes may generate the same code.

#### 3 - FAULT FINDING :

Carryout of stages 1 and 2: an oscilloscope test may clarify the code transmitted in stage two.

##### **a - The television set operates fully or partially**

- Use LED message observation fault finding methods 1 and 2. See also the faults listed relating to fault finding by symptom.

##### **b - The television goes into permanent or cyclical security mode**

- Observe LED's behaviour (flashing red, stable orange followed by flashing, etc.).  
Select the relevant box in the column (LED behaviour fault finding).

**POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN**

(5) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground ( PGND ).

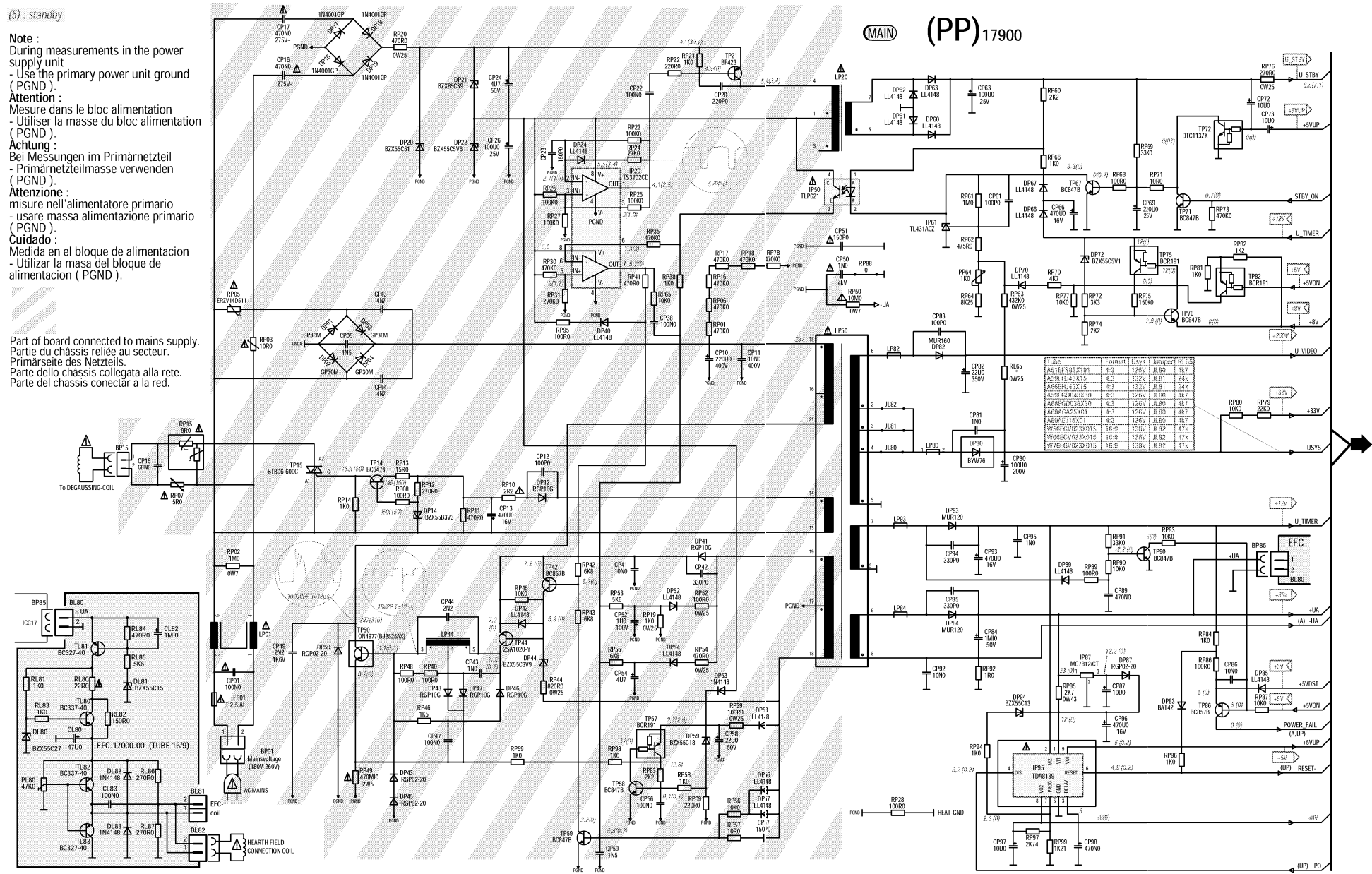
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation  
( PGND ).


**Achtung :**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden  
( PGND ).

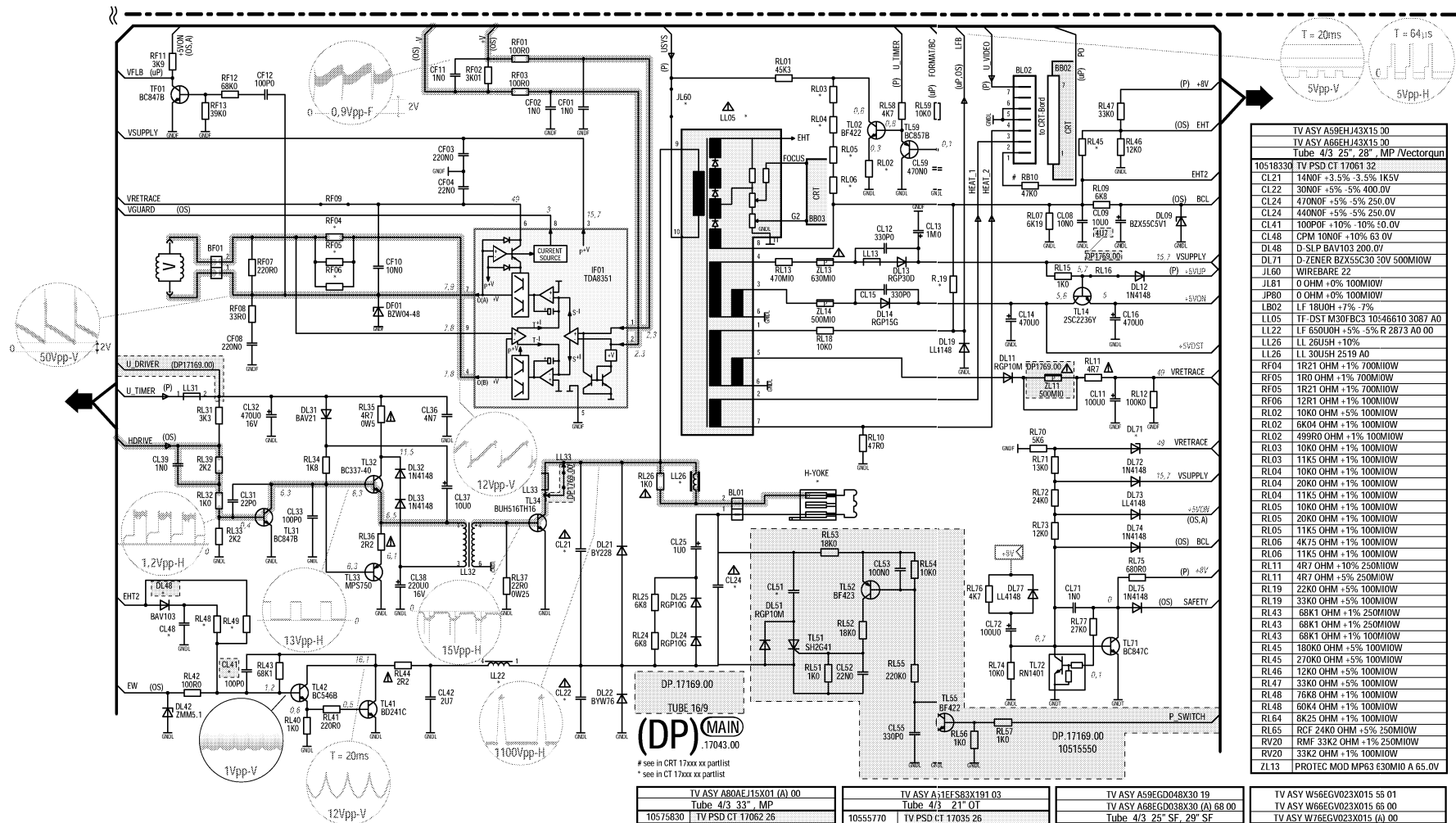
**Attenzione :**  
 misure nell'alimentatore primario  
 - usare massa alimentazione primario  
 ( PGND ).

**Cuidado :**  
Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion ( PGND ).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectar a la red.



 Use isolating mains transformer - Utiliser un transformateur isolateur du secteur -Einen Trenntrafo verwenden  
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarvi dalla rete



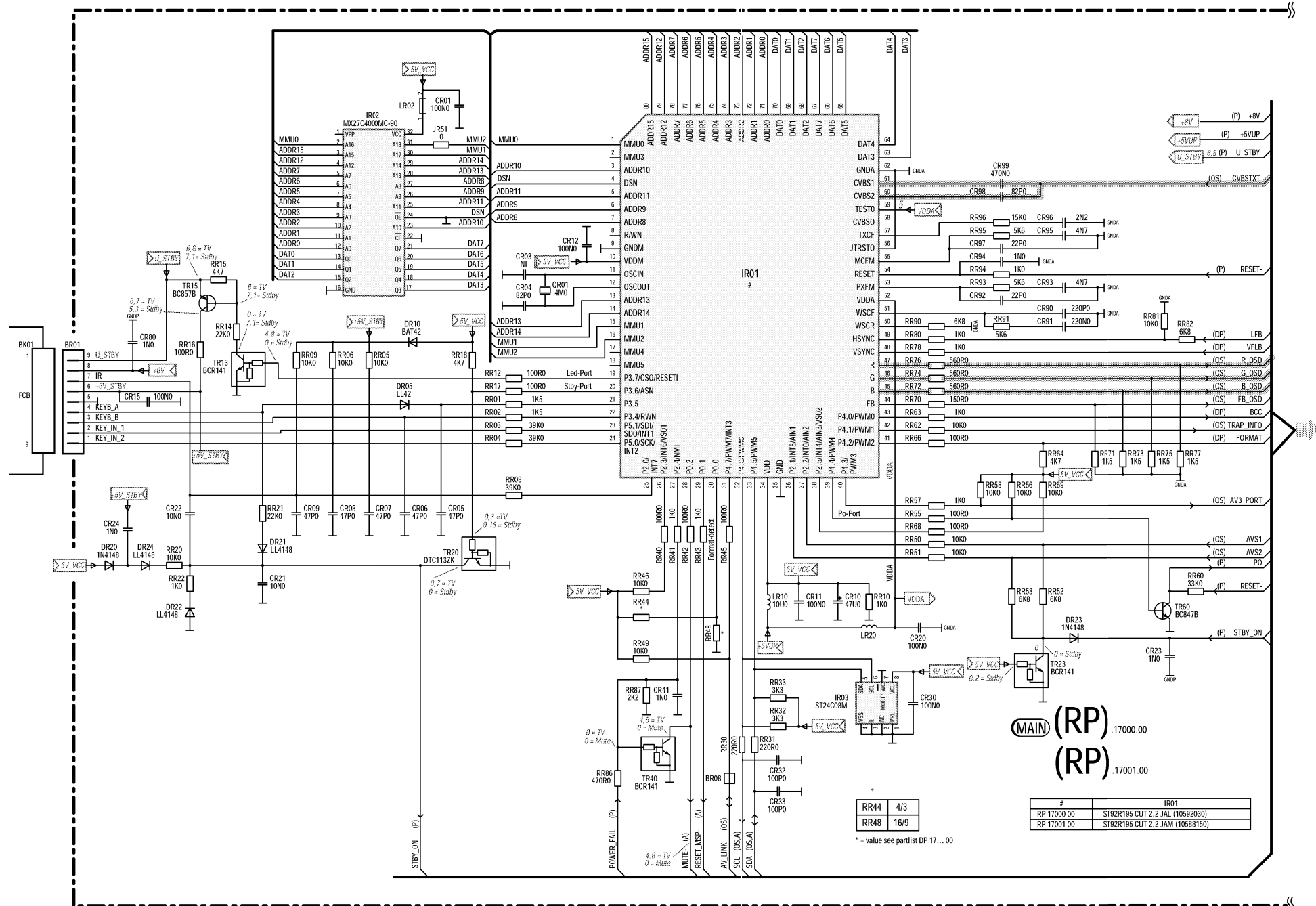
⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.  
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

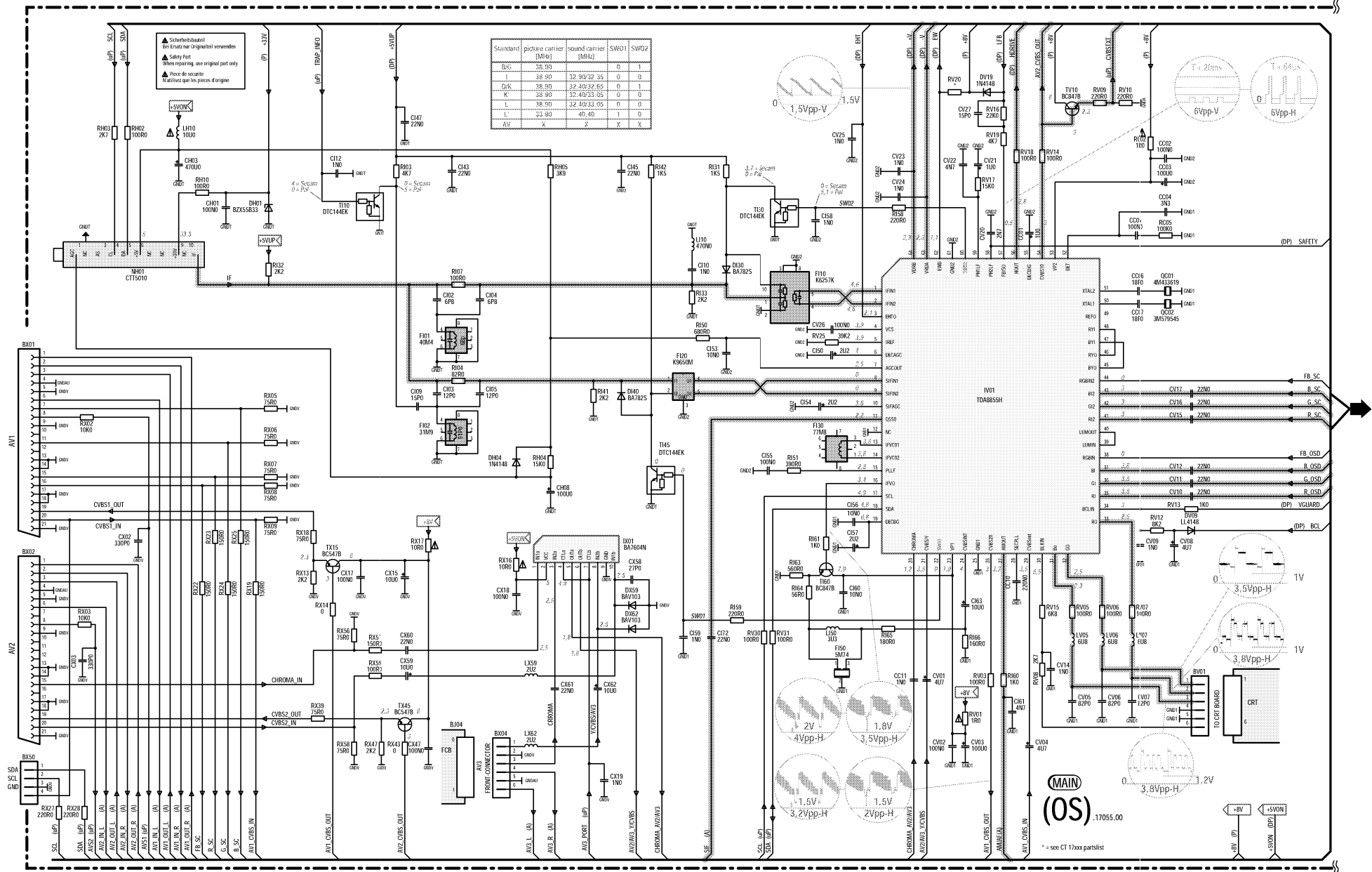
Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.  
In tal caso è "esclusa la responsabilità" del costruttore.

La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.  
En ese caso, el fabricante cesa de ser responsable.

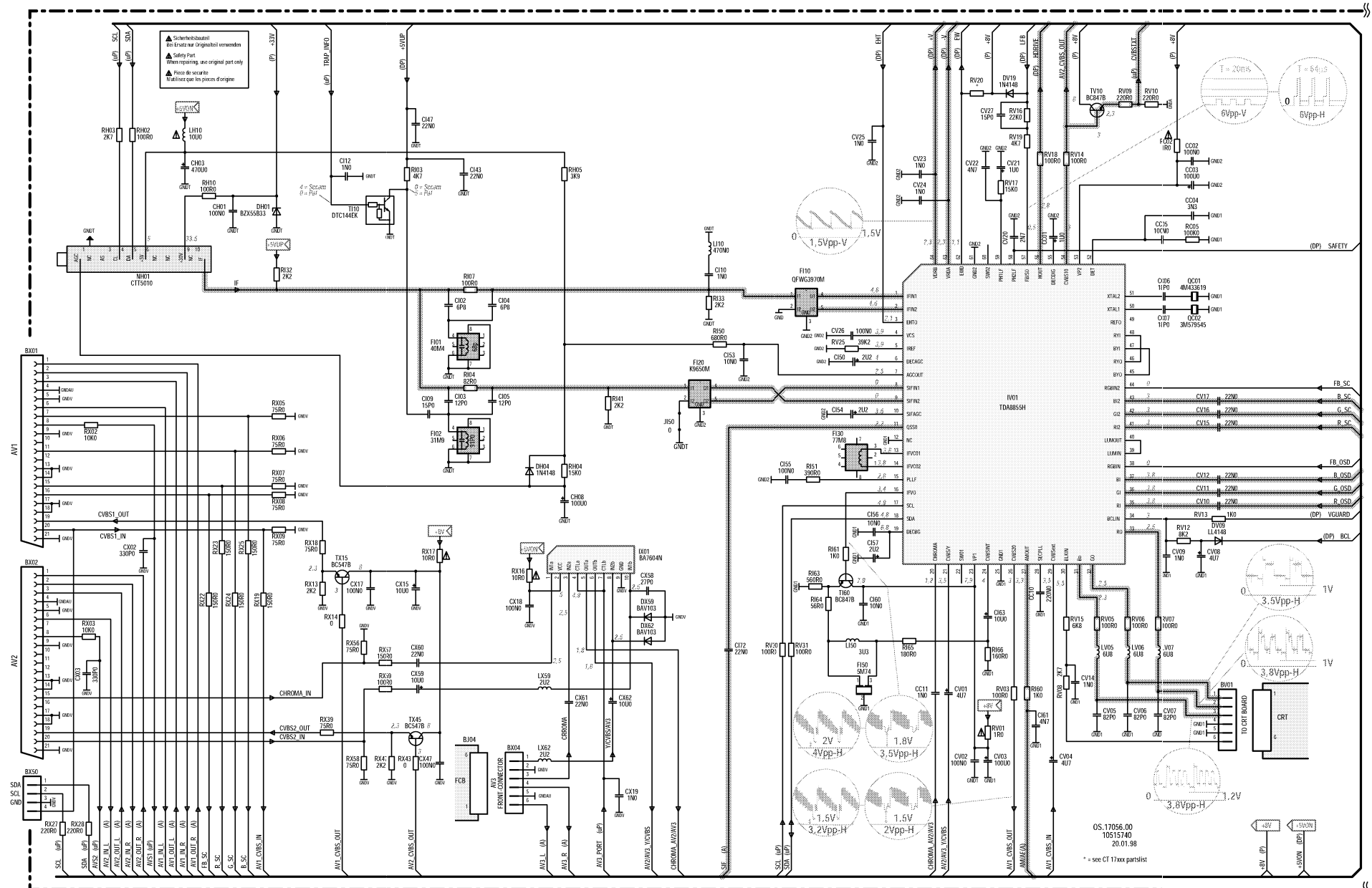


RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO

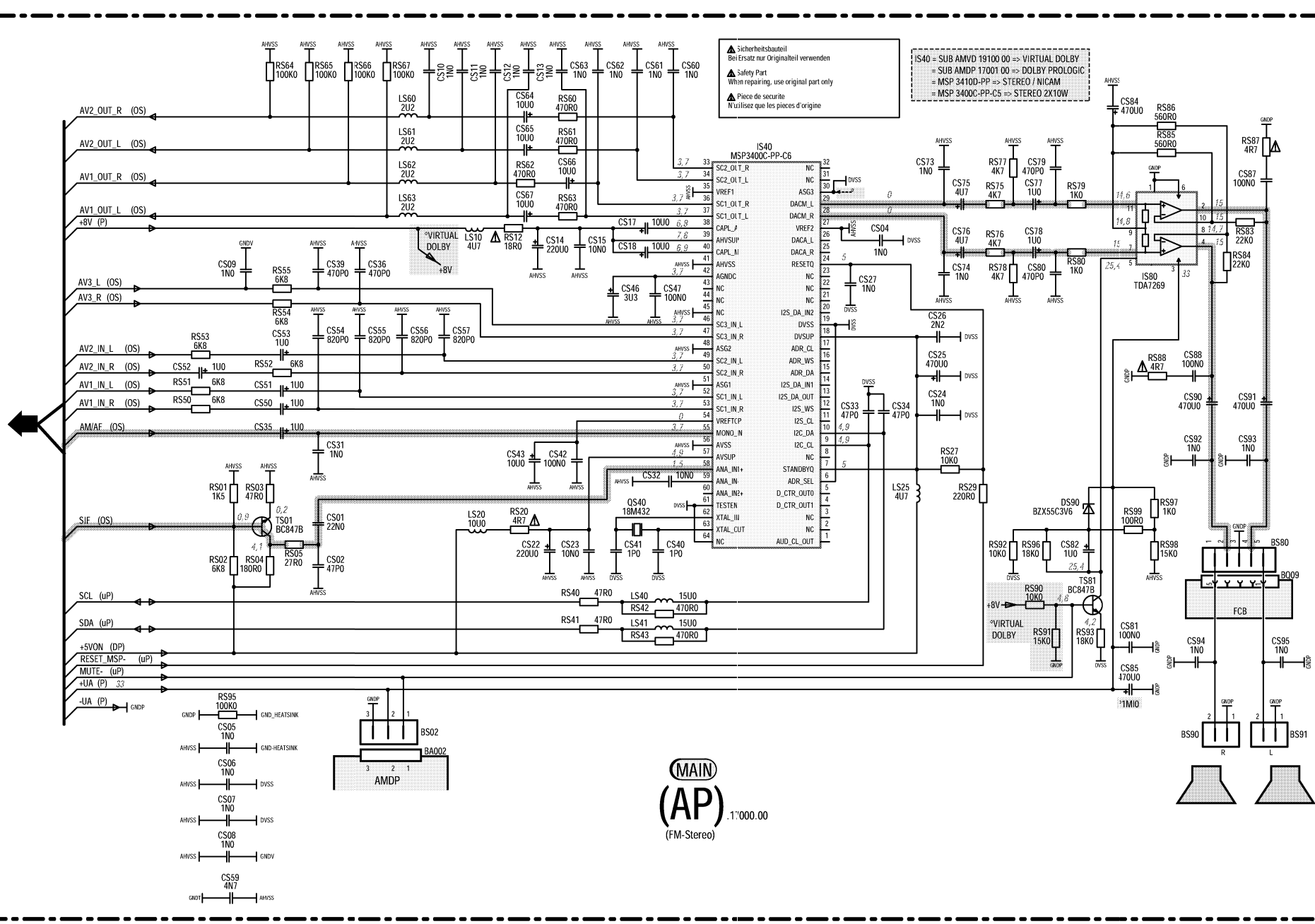




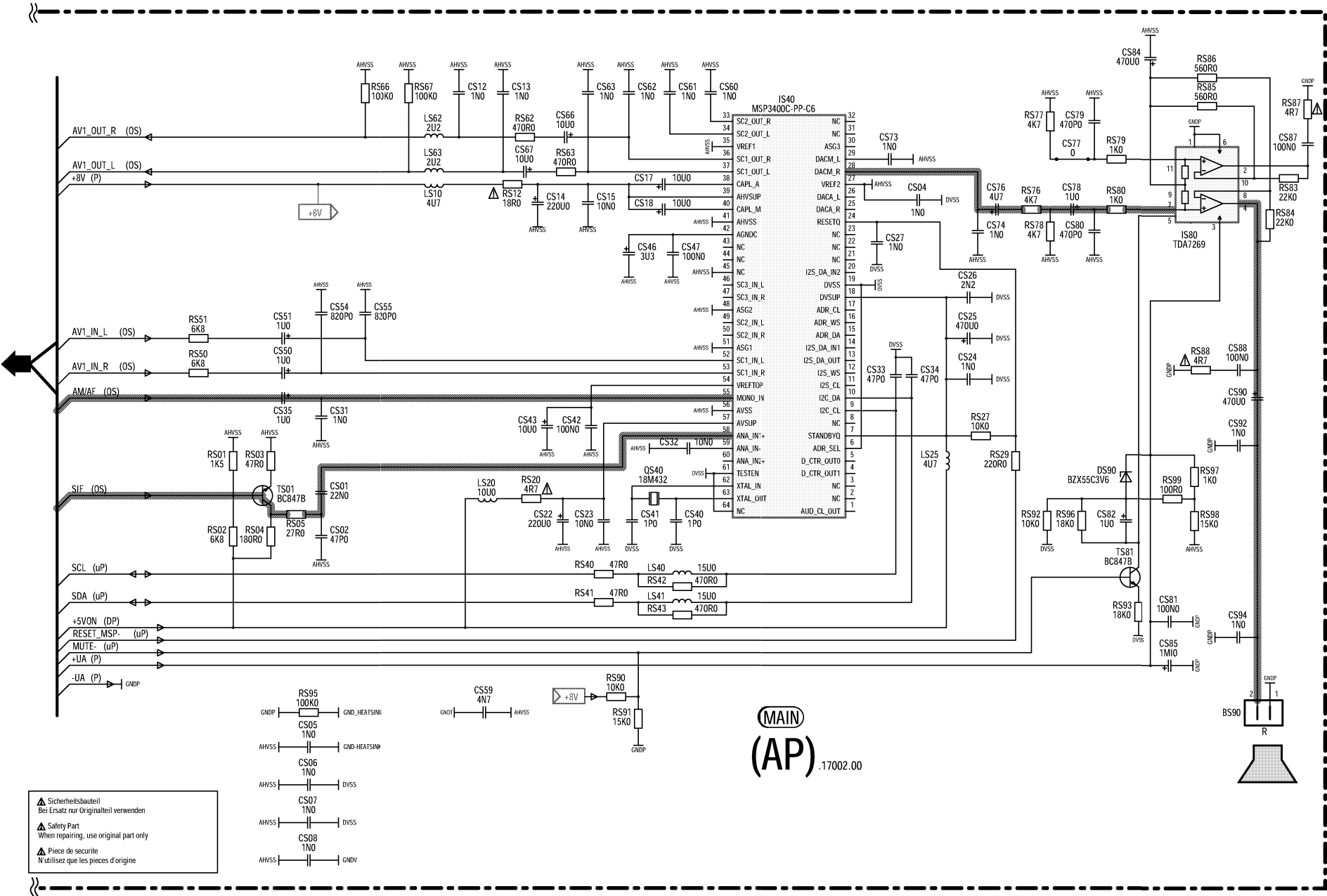
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAIEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



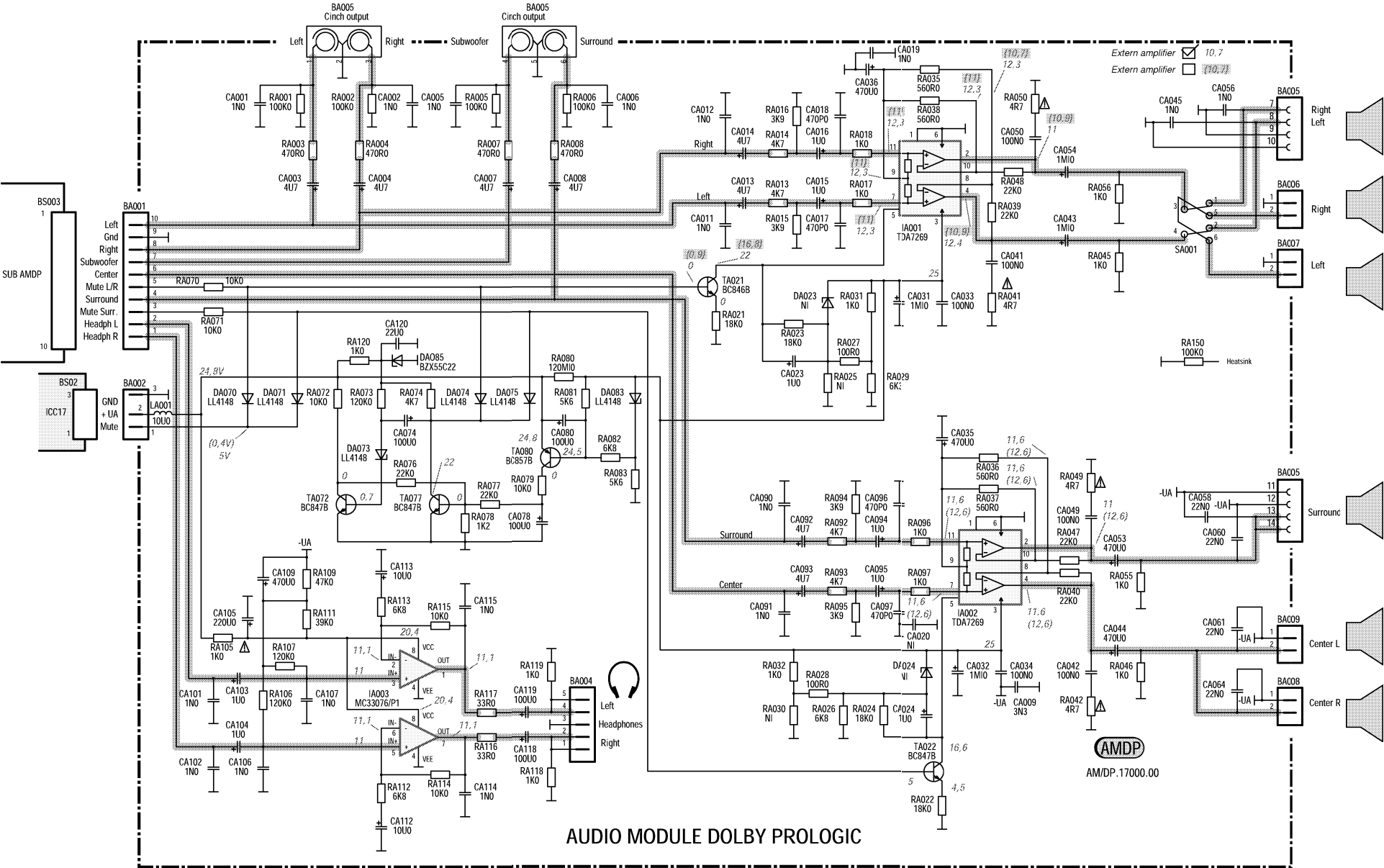
# AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE ESQUEMA DEL AMPLIFICADOR (STEREO)

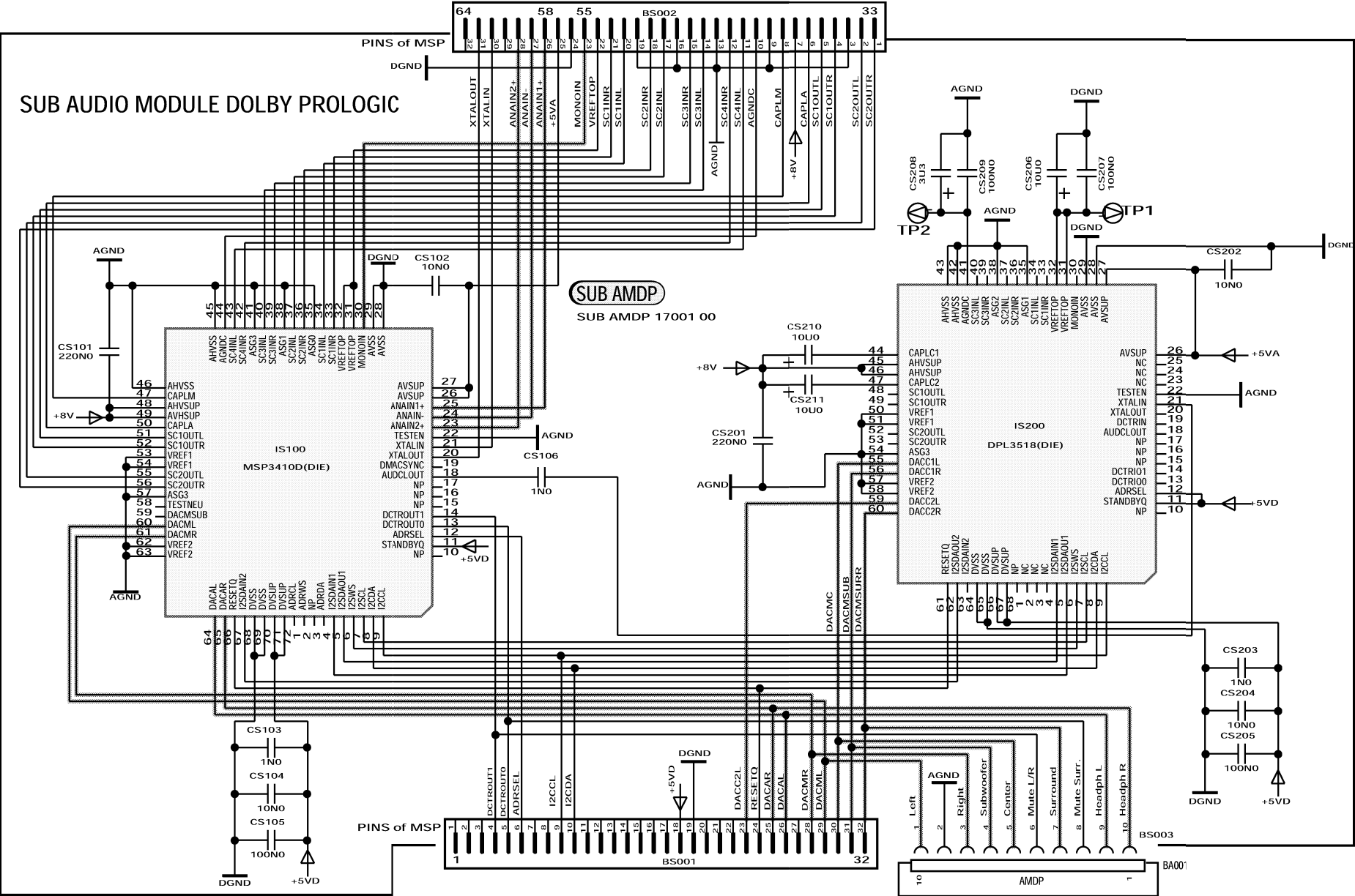


AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MODULO AUDIO DOLBY PROLOGIC  
ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO



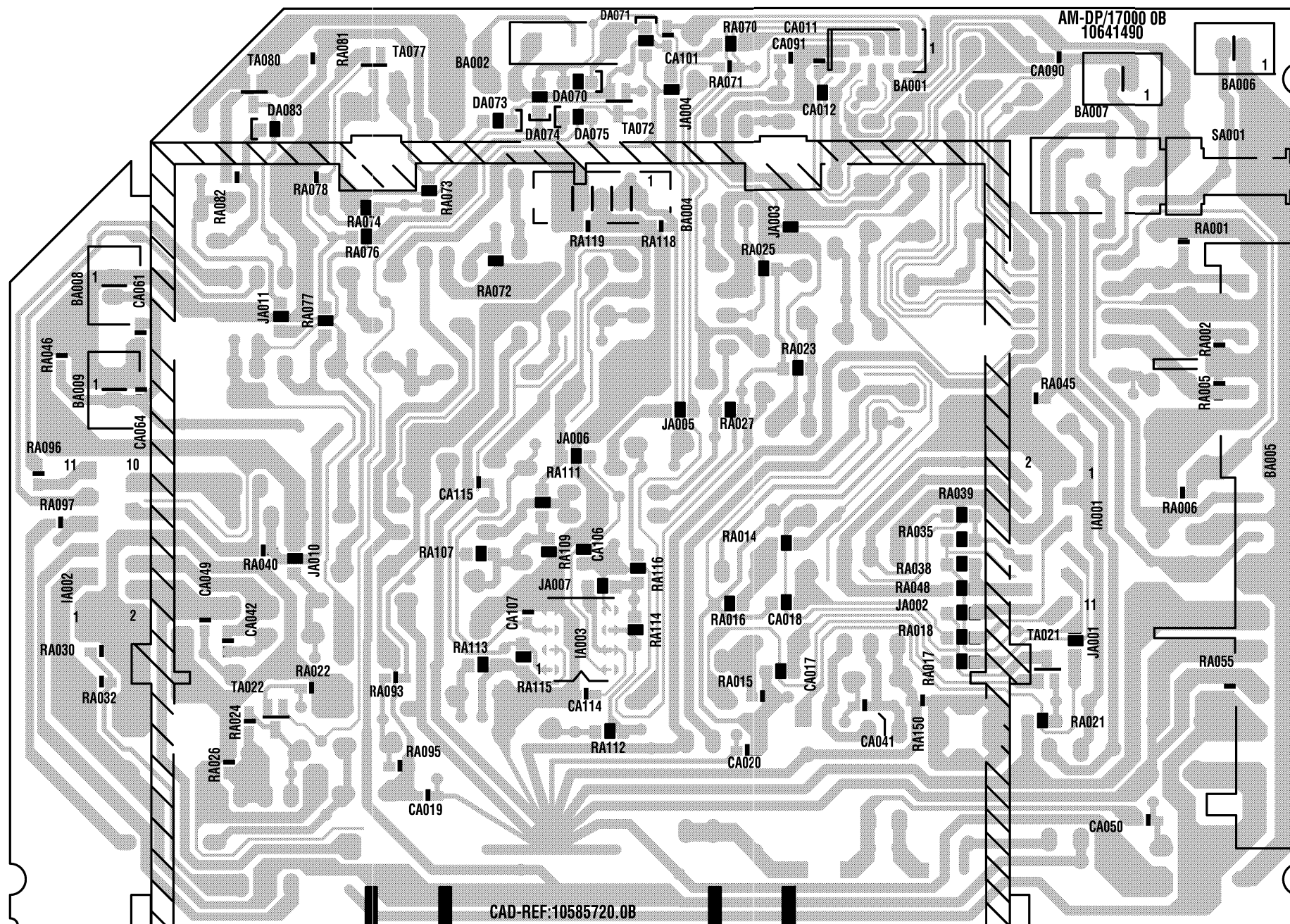






**AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MODULO AUDIO DOLBY PROLOGIC - ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO**

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



**POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN**

(5) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground ( PGND ).

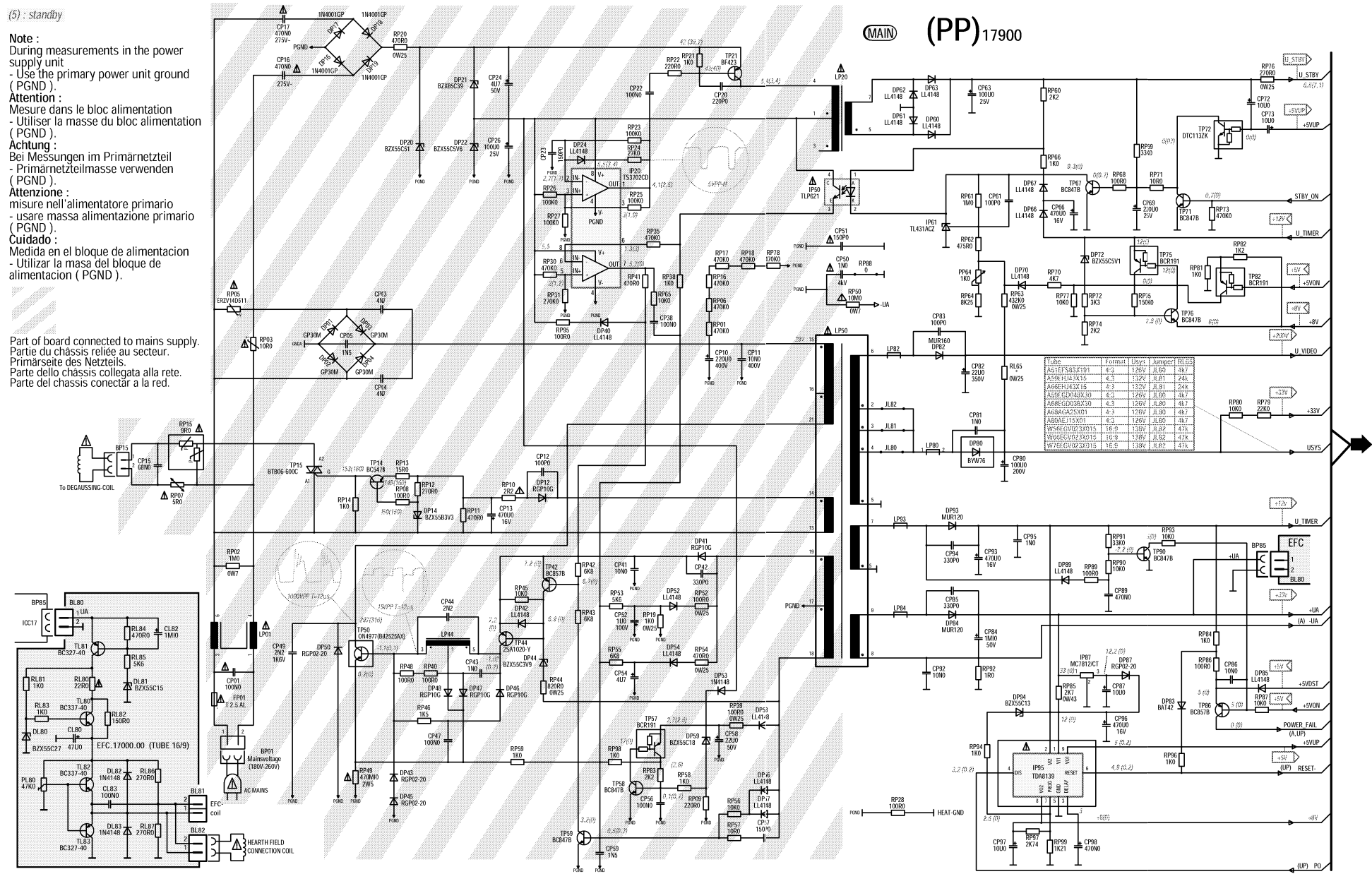
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation  
( PGND ).


**Achtung:**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden  
( PGND ).

**Attenzione :**  
 misure nell'alimentatore primario  
 - usare massa alimentazione primario  
 ( PGND ).

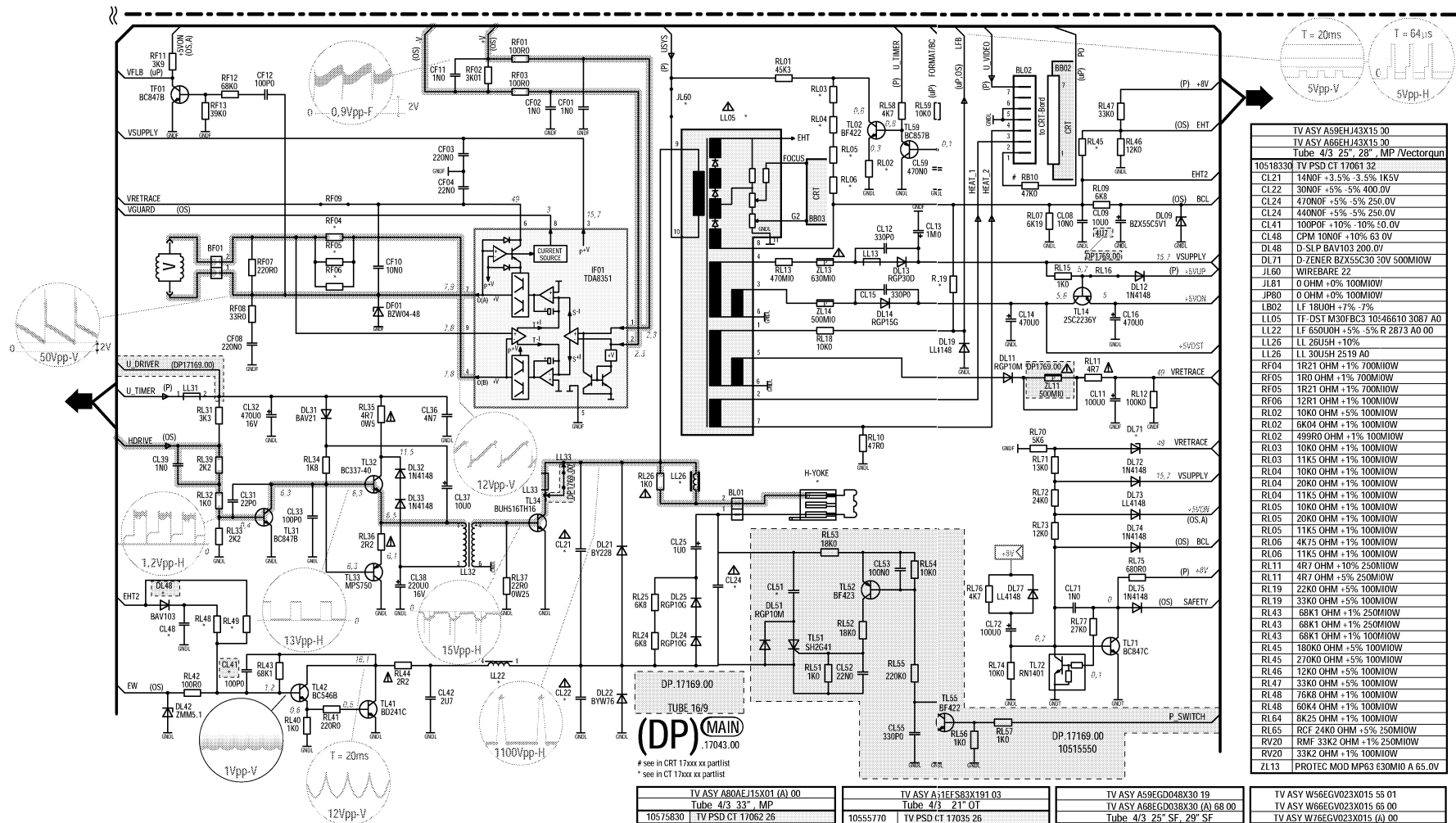
**Cuidado :**  
Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion ( PGND ).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassiss conectar a la red.



 Use isolating mains transformer - Utiliser un transformateur isolateur du secteur - Einen Trenntrafo verwenden  
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarvi dalla rete





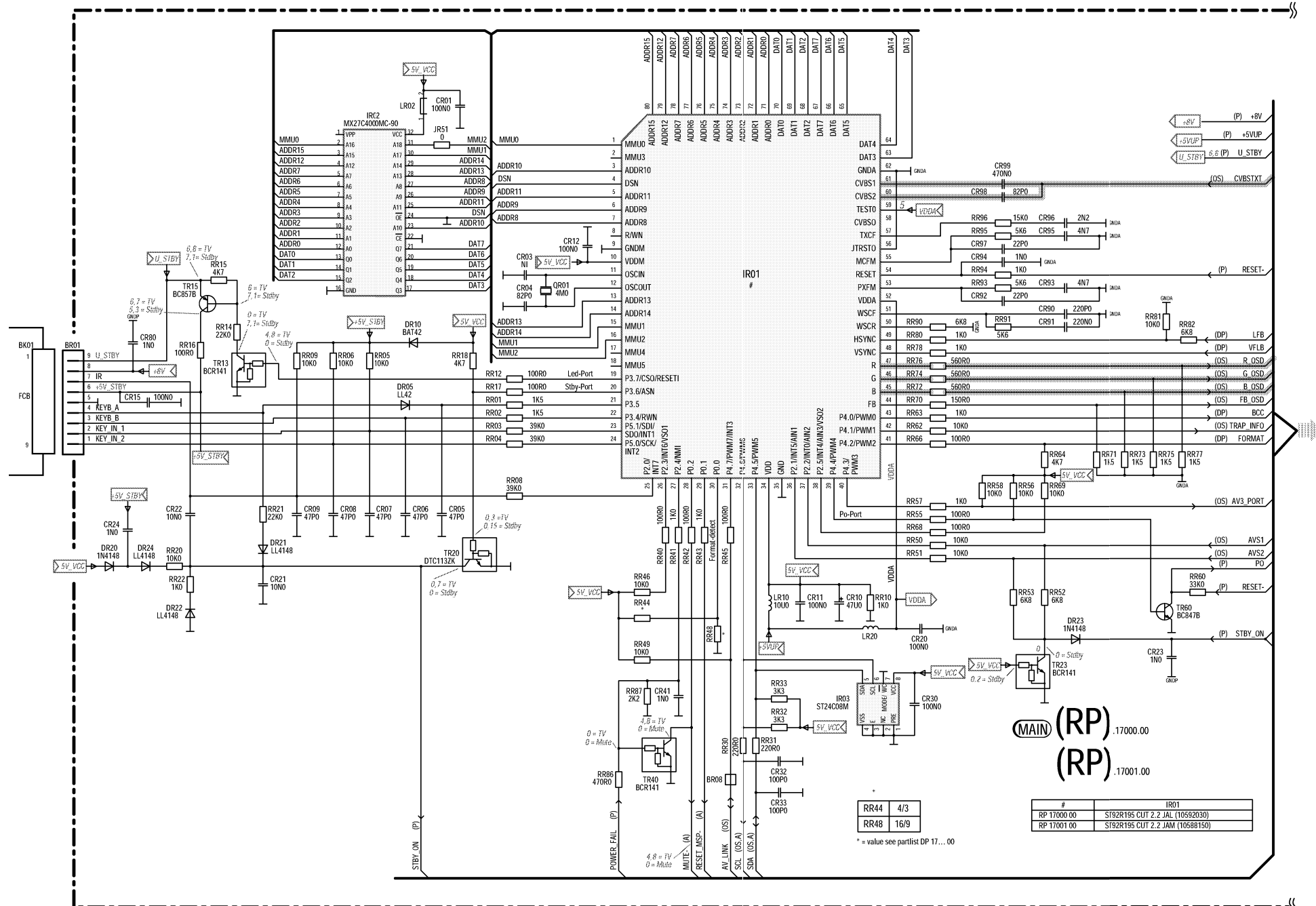
⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

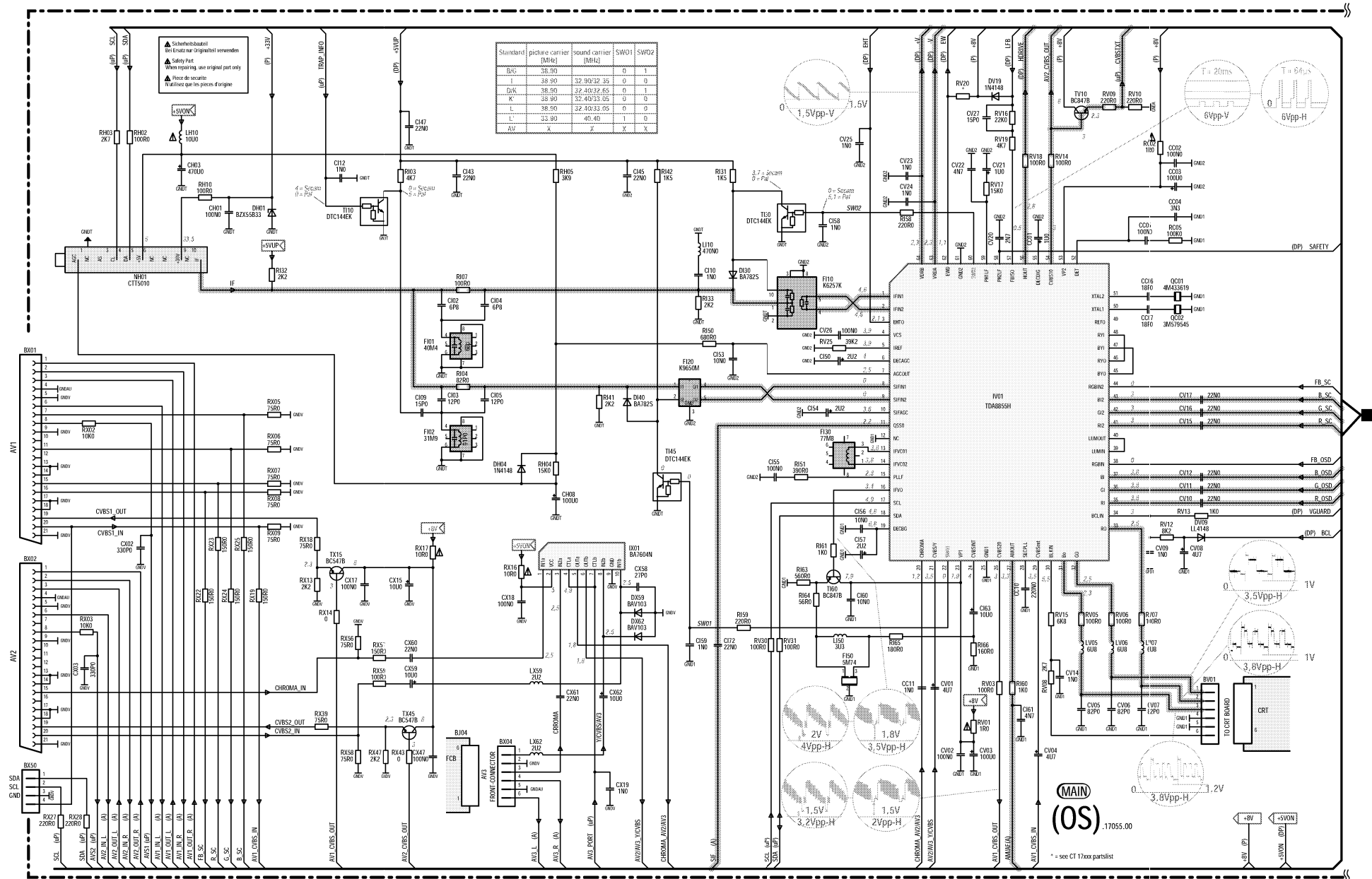
Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.  
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

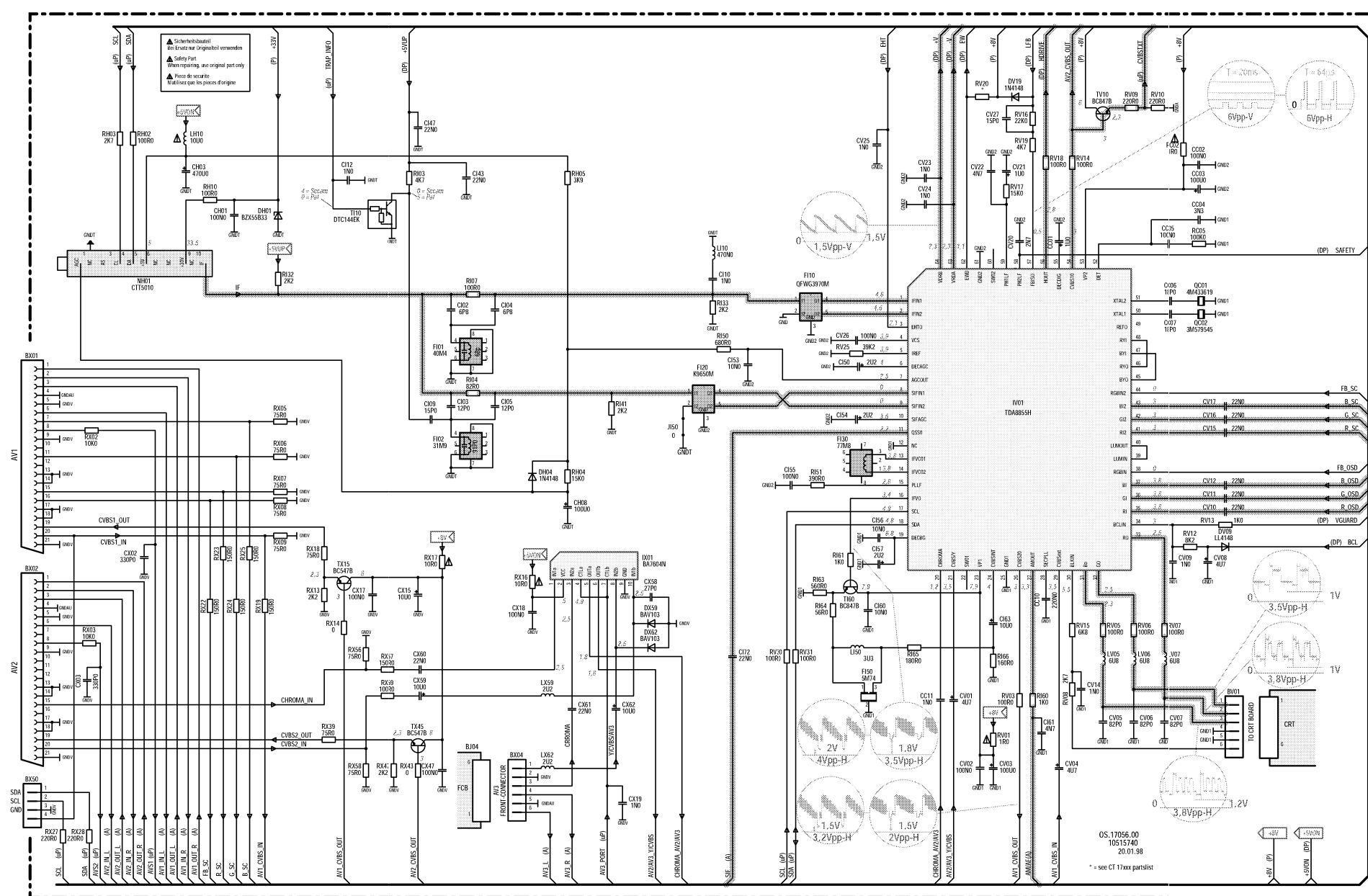
La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.  
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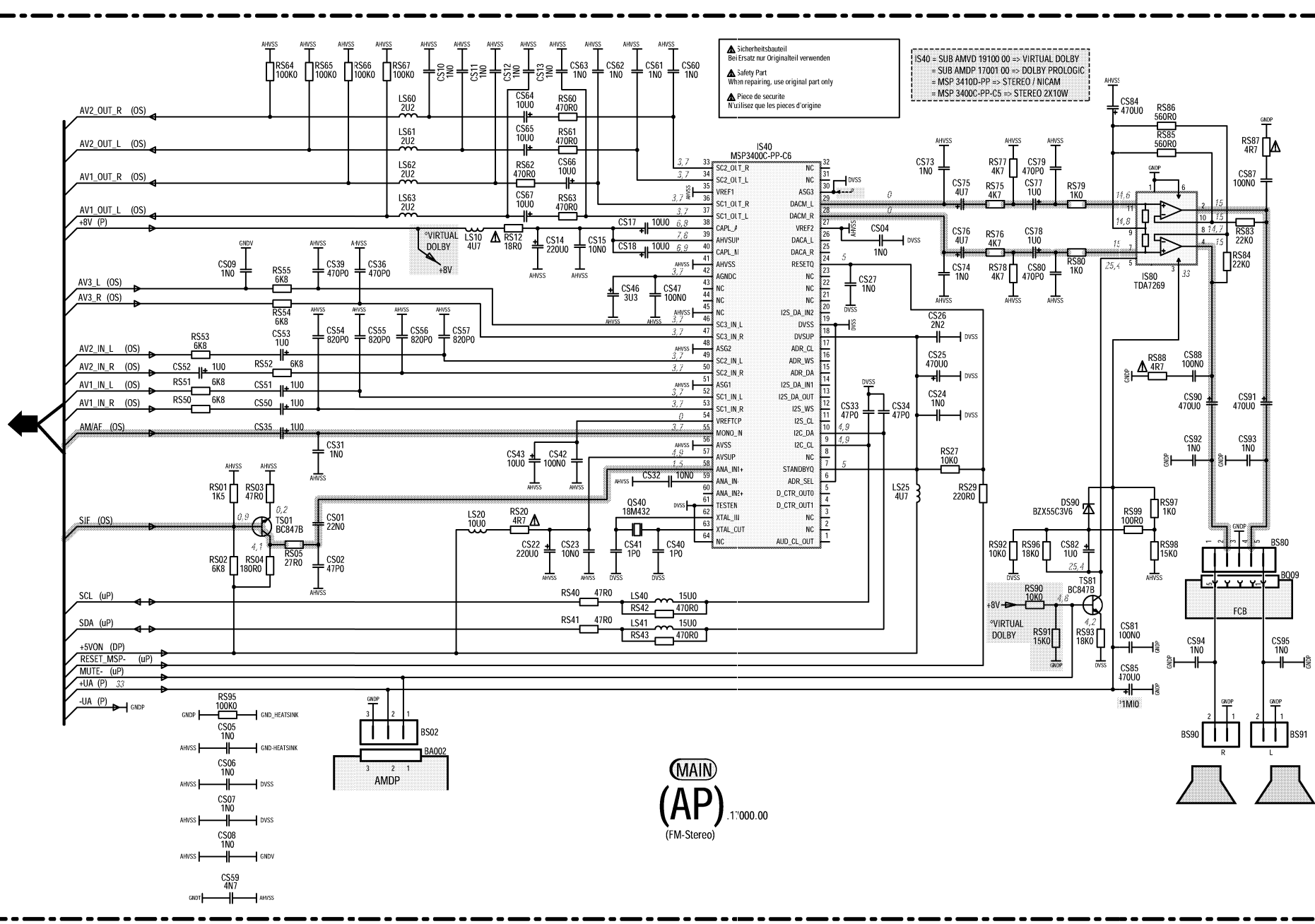




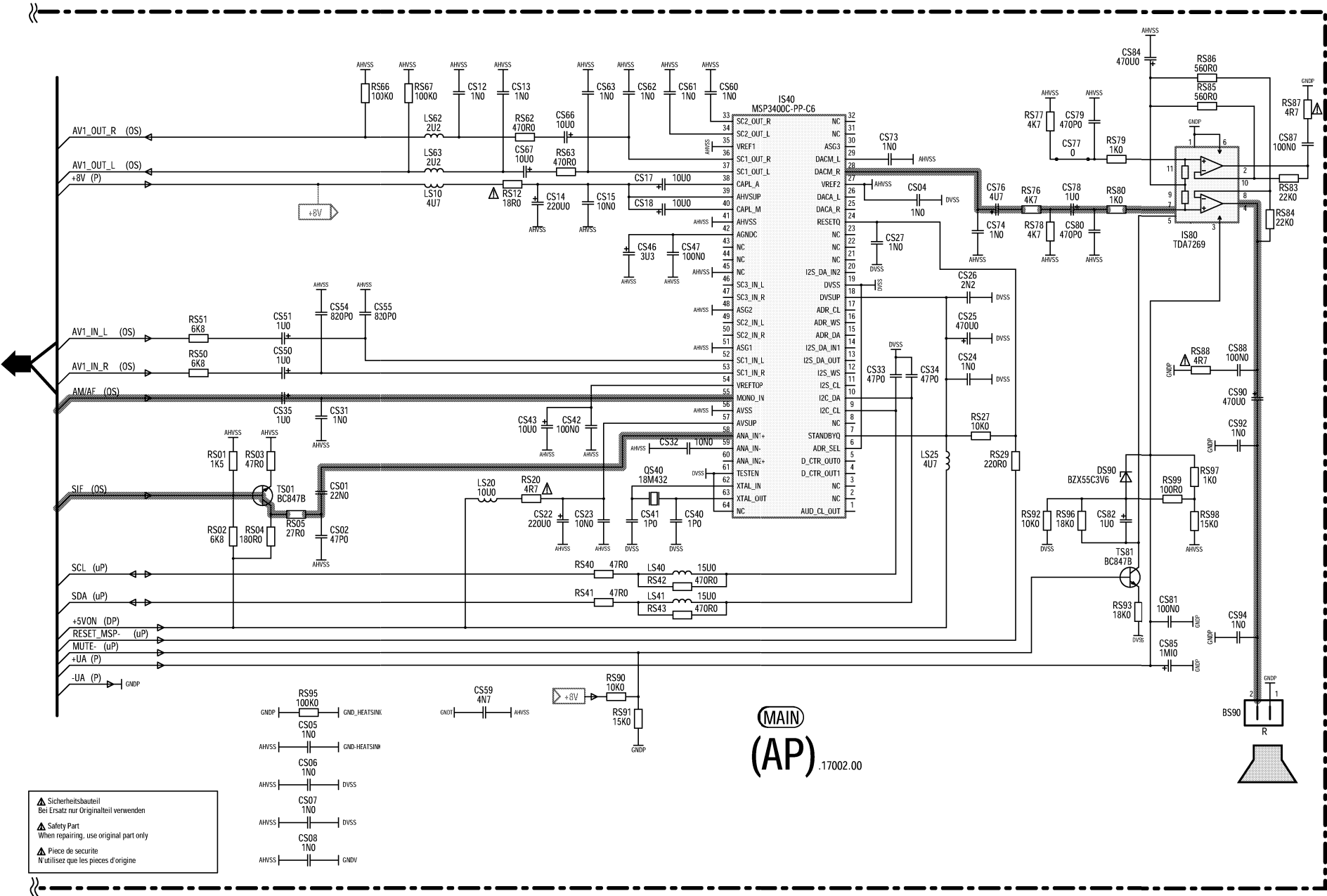
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



# AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE ESQUEMA DEL AMPLIFICADOR (STEREO)

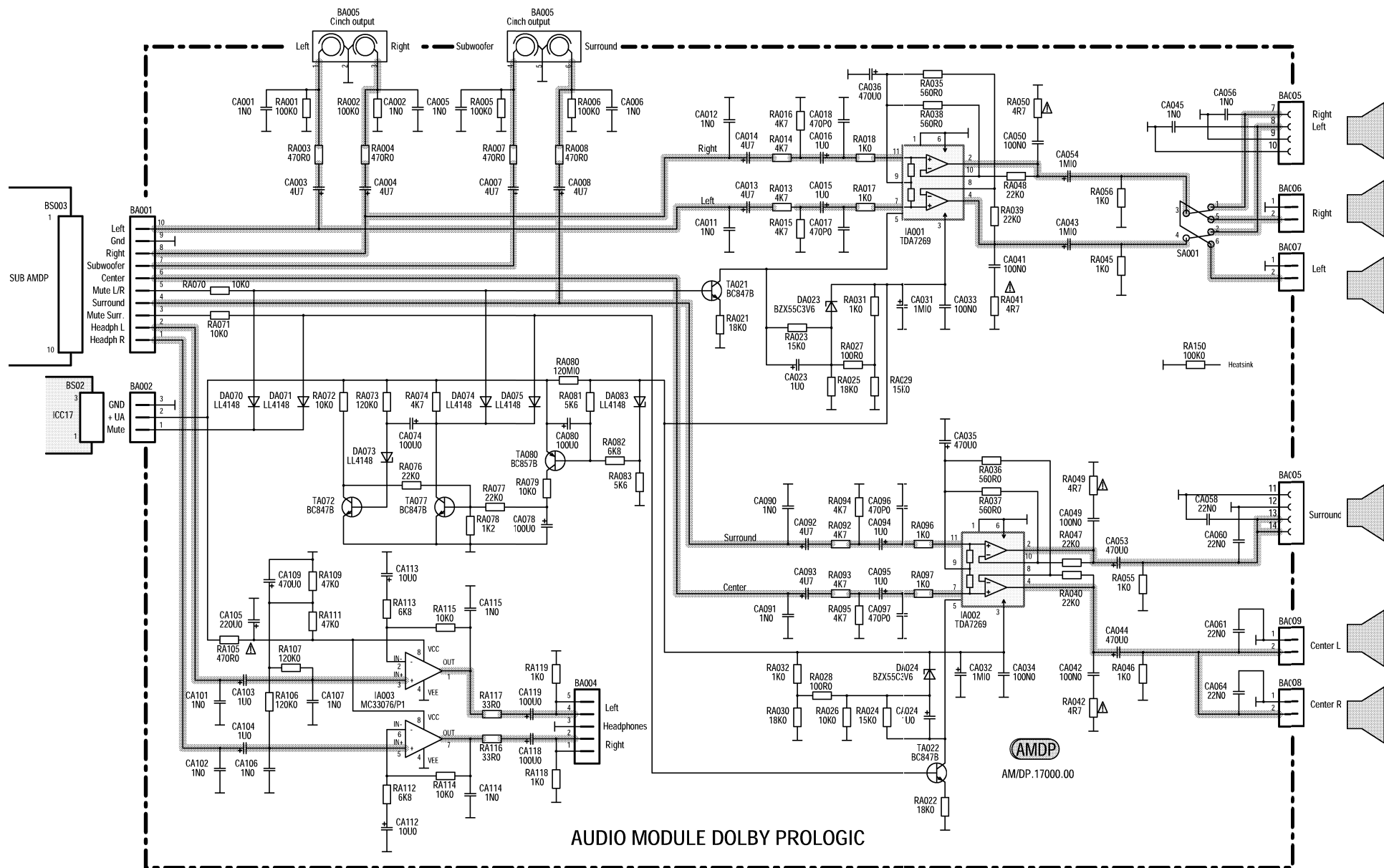


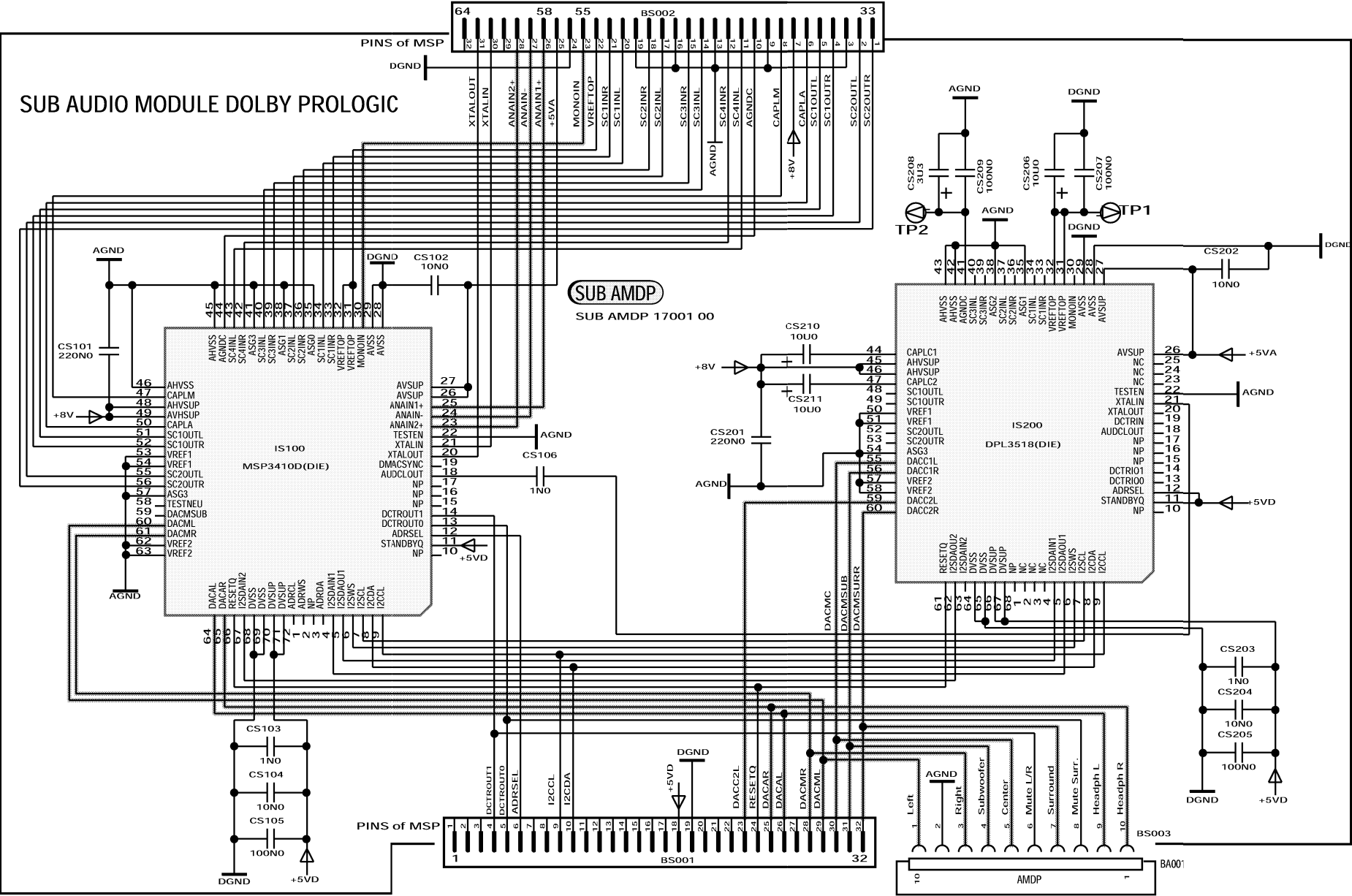
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



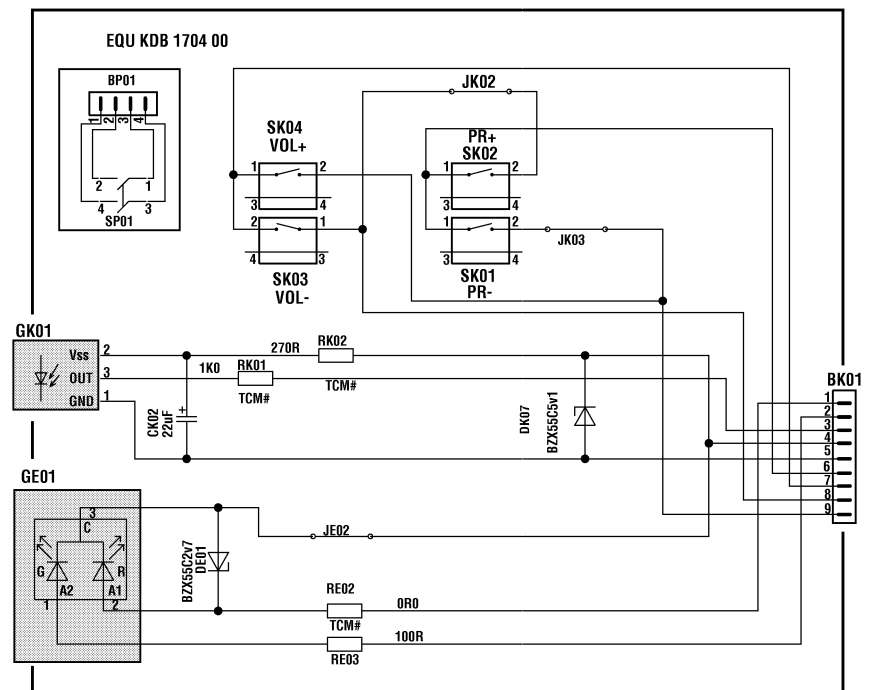
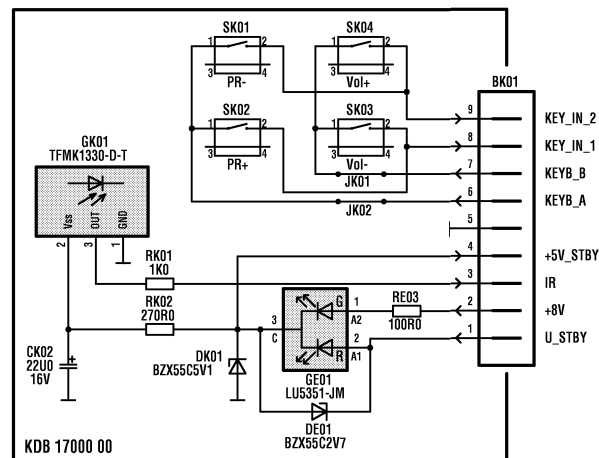
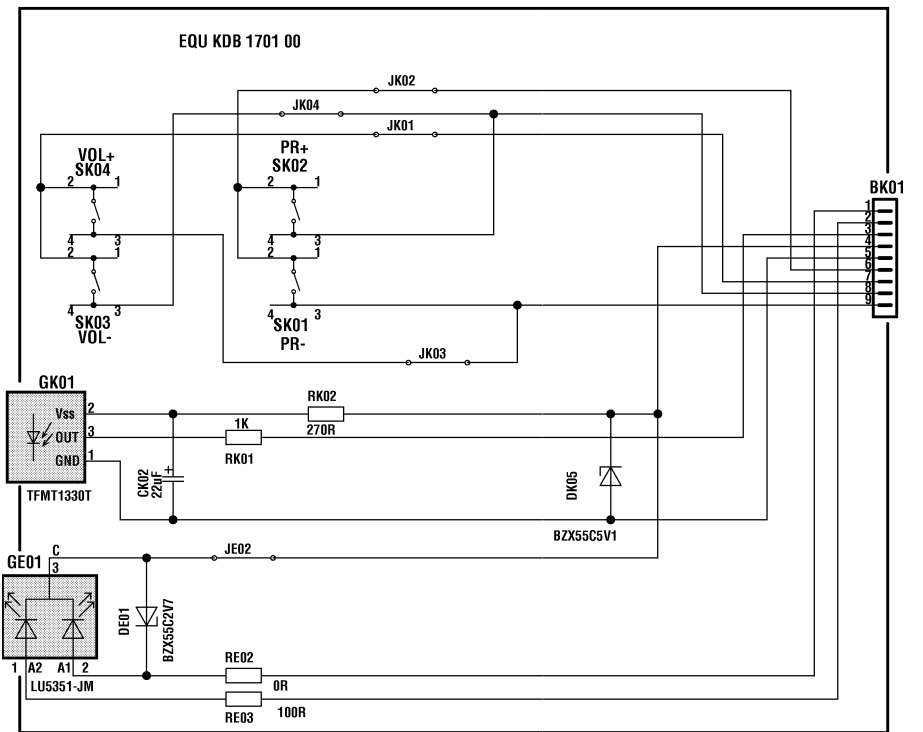
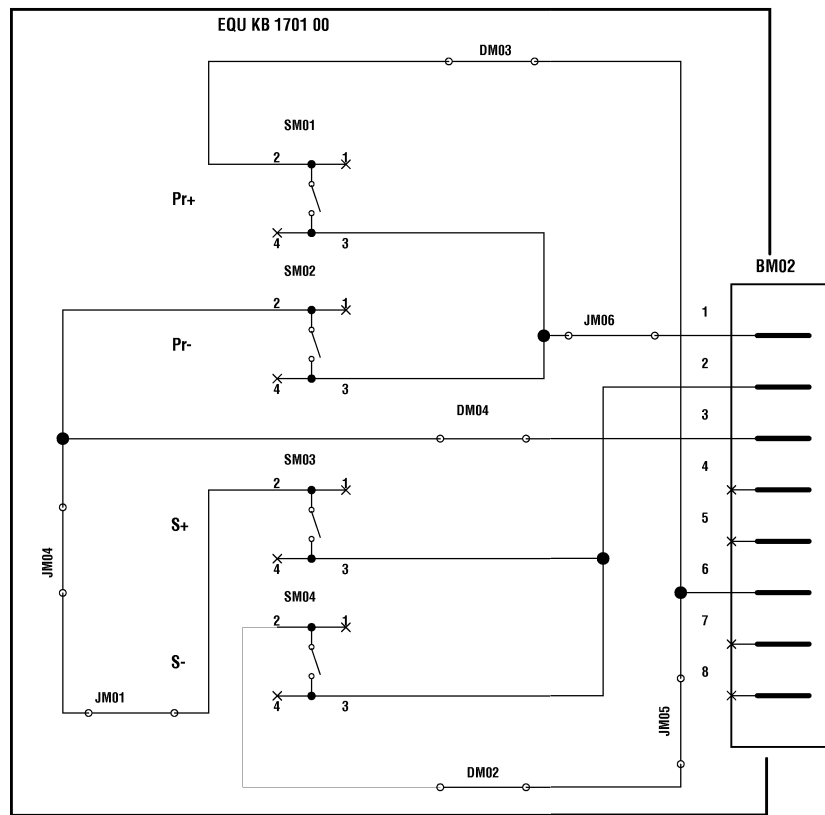
# AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MODULO AUDIO DOLBY PROLOGIC

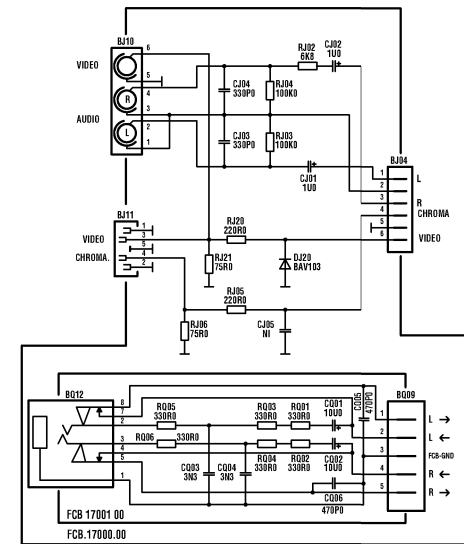
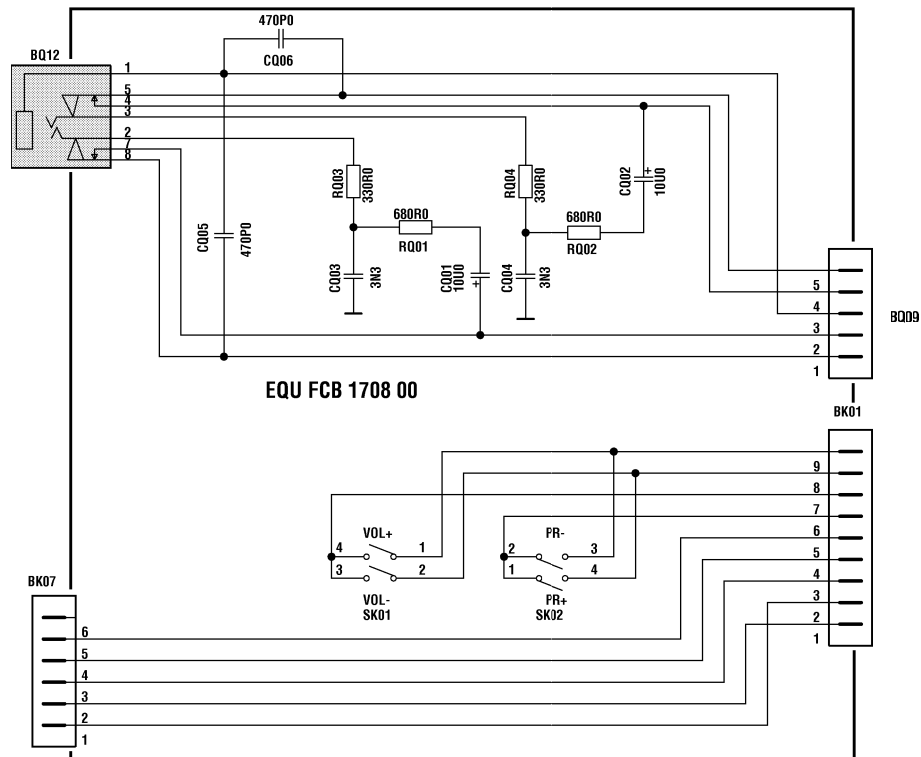
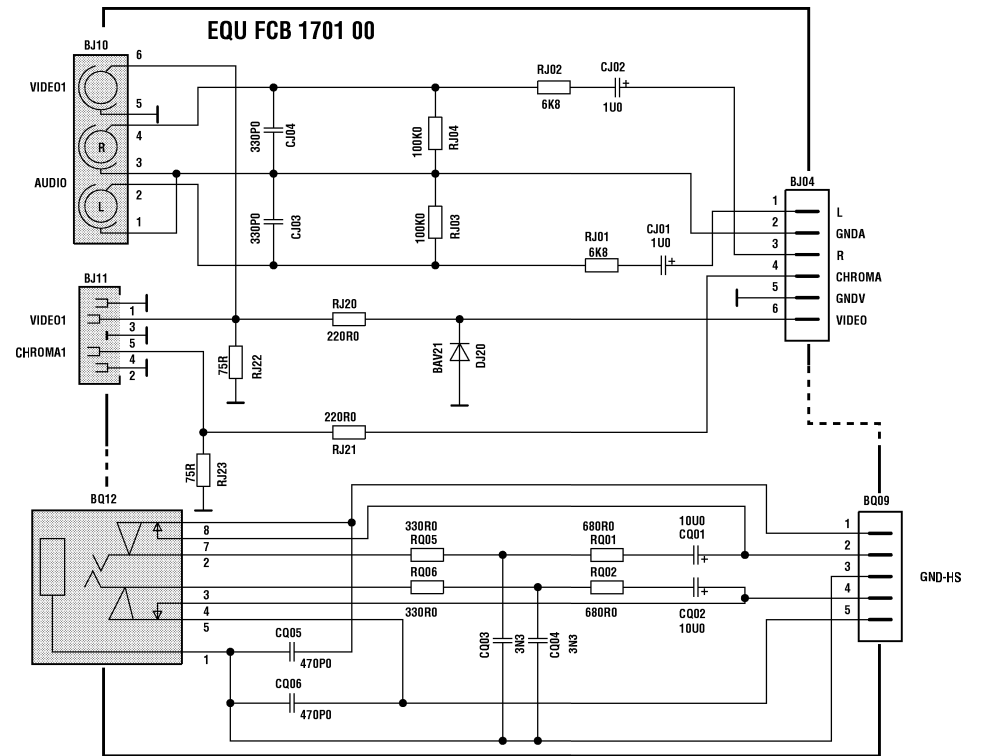
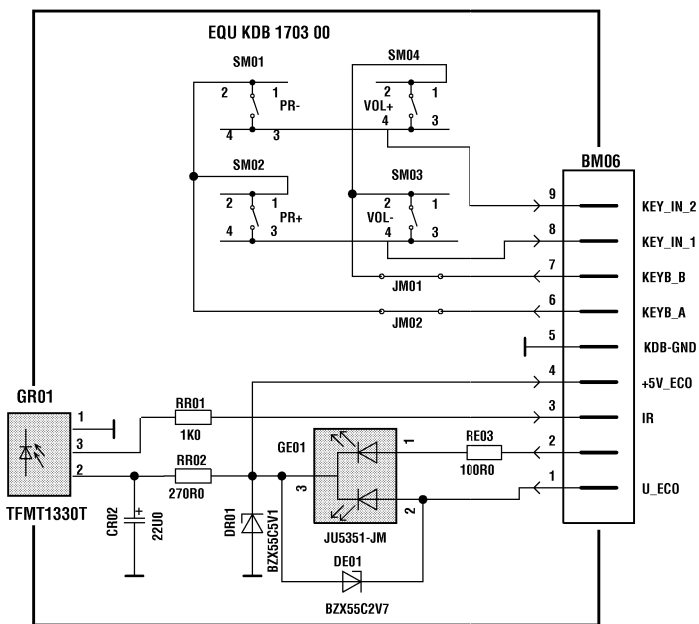
## ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO

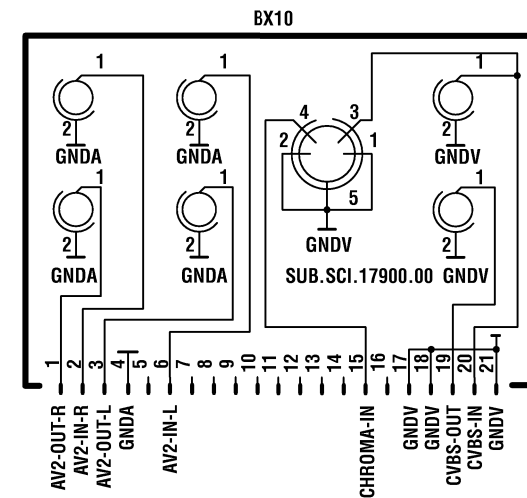
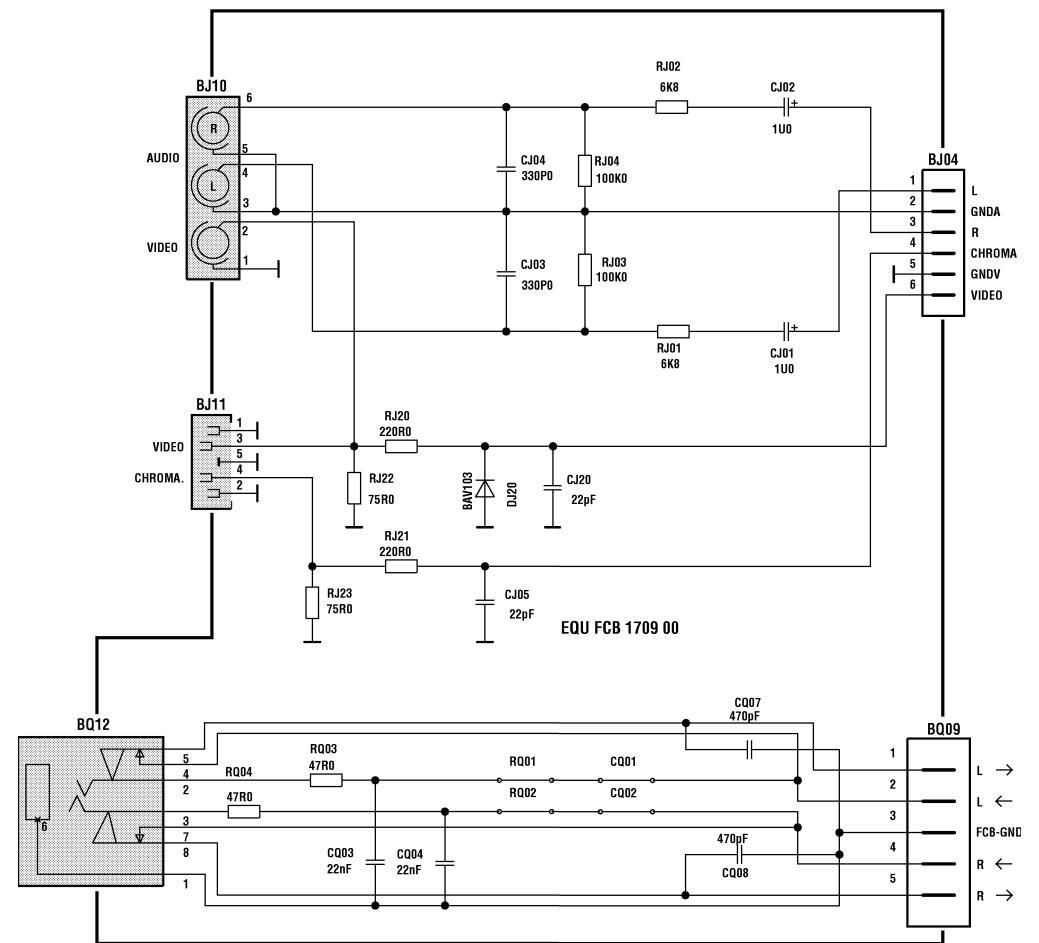
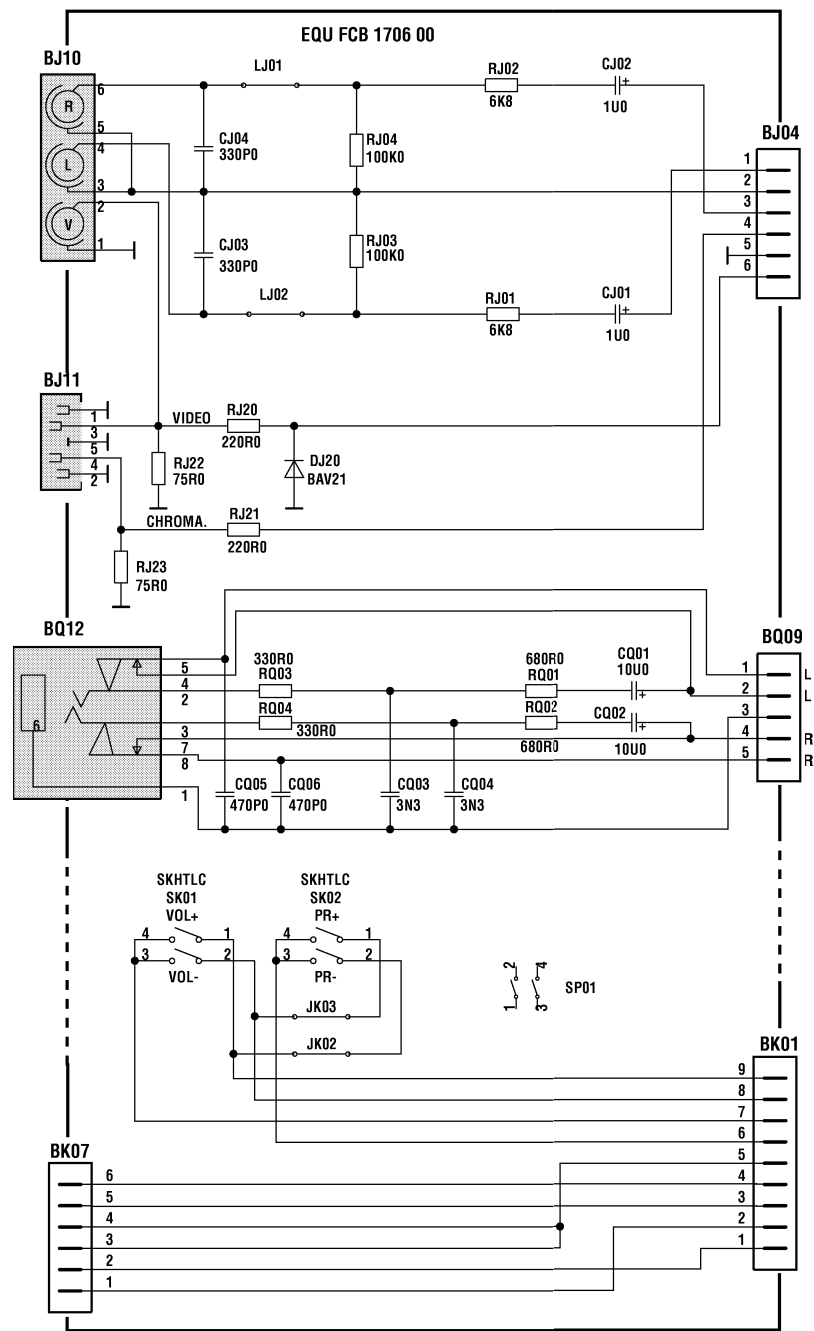


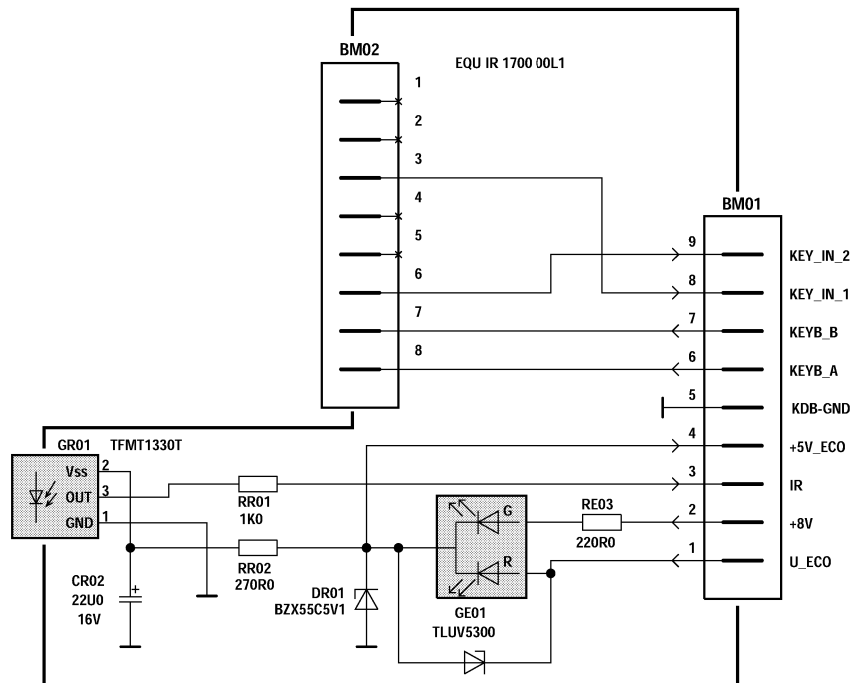
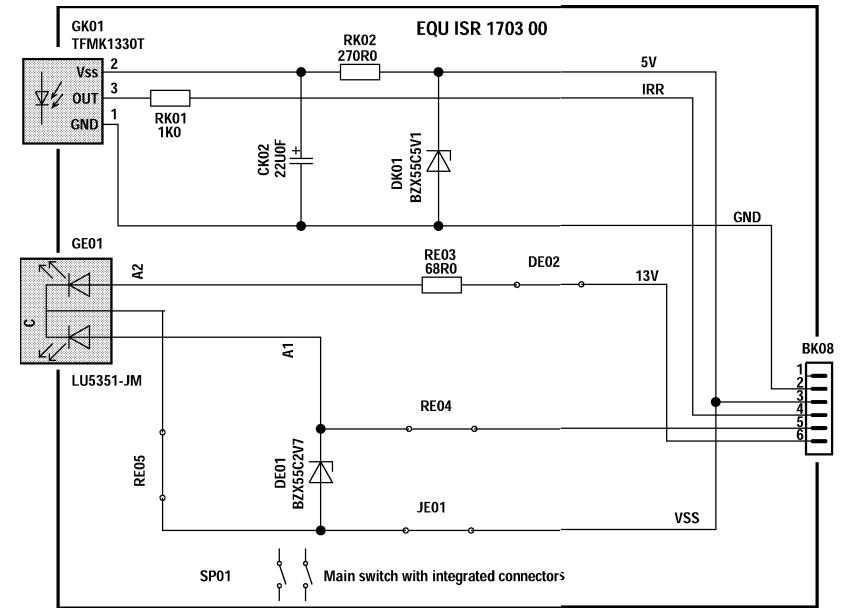
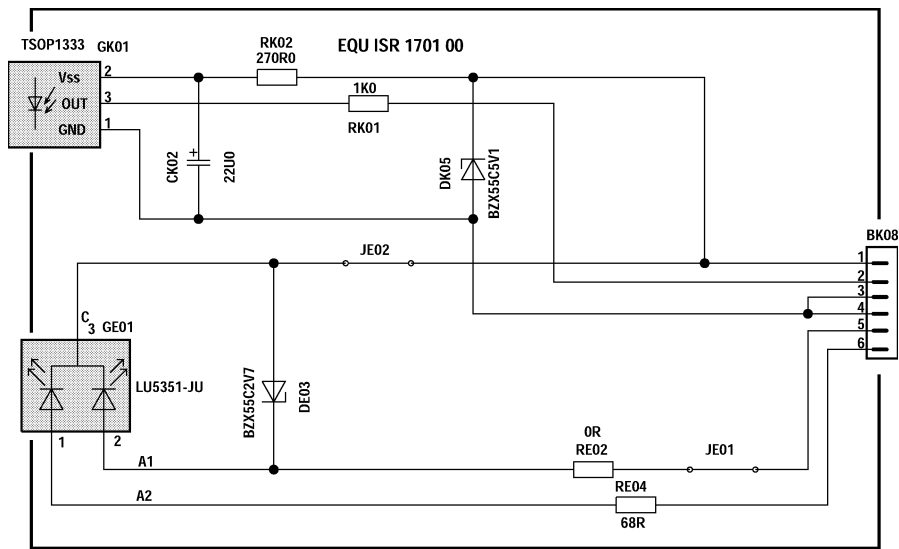












**POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN**

(5) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground ( PGND ).

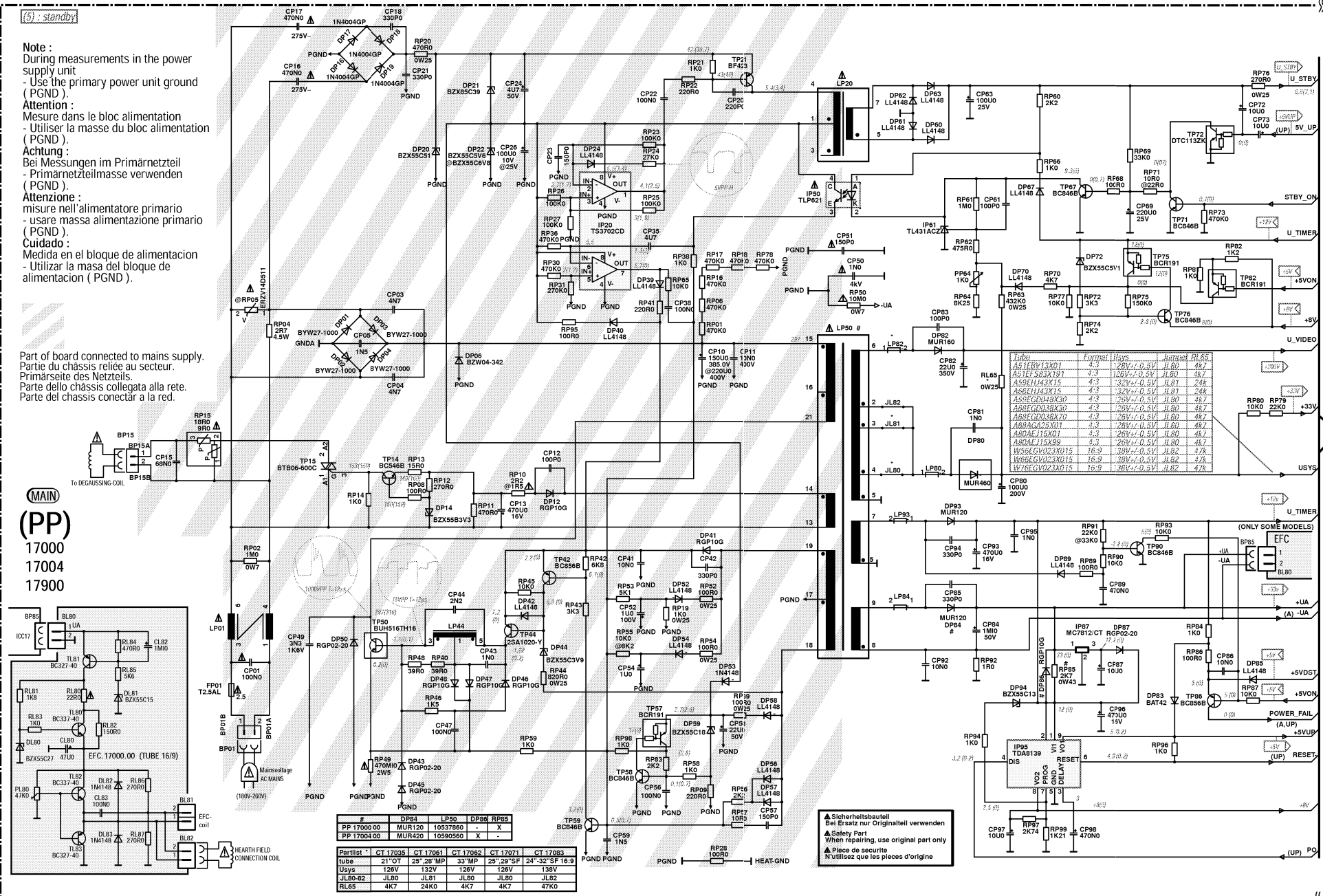
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation  
( PGND ).

**Achtung:**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden  
( PGND ).

**Attenzione :**  
 misure nell'alimentatore primario  
 - usare massa alimentazione primario  
 ( PGND ).

**Cuidado:**  
Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion ( PGND ).

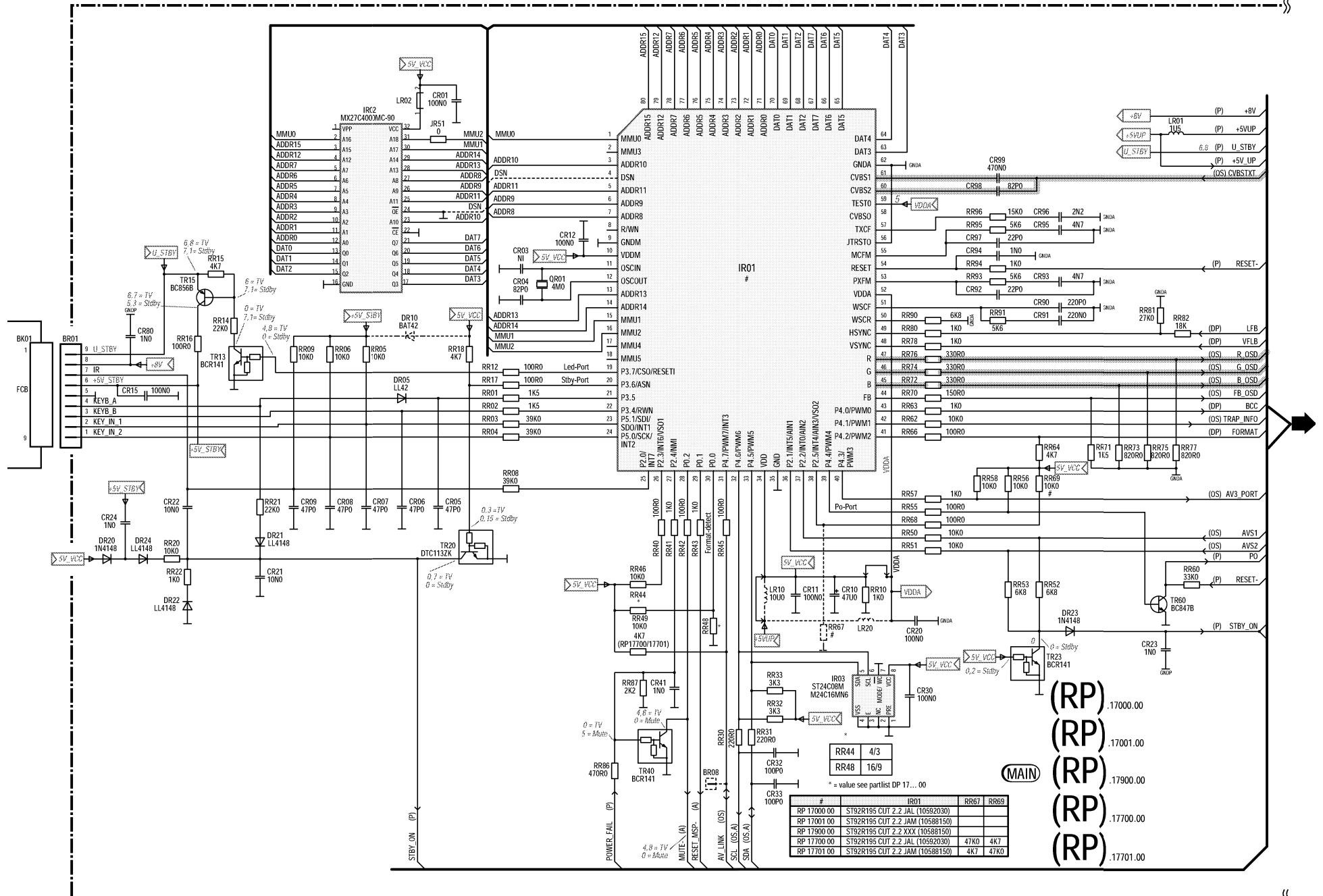
Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassís conecatar a la red.



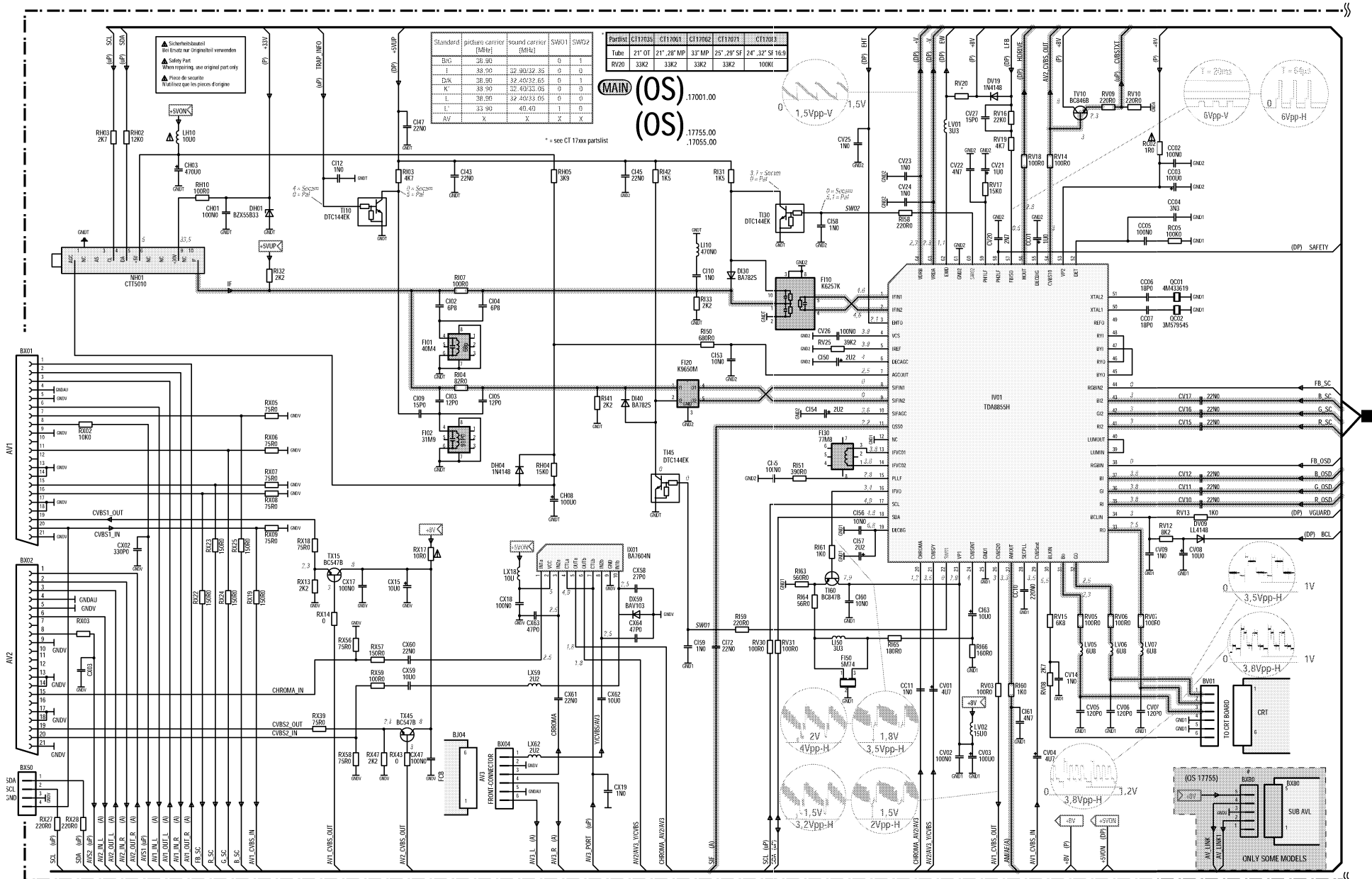


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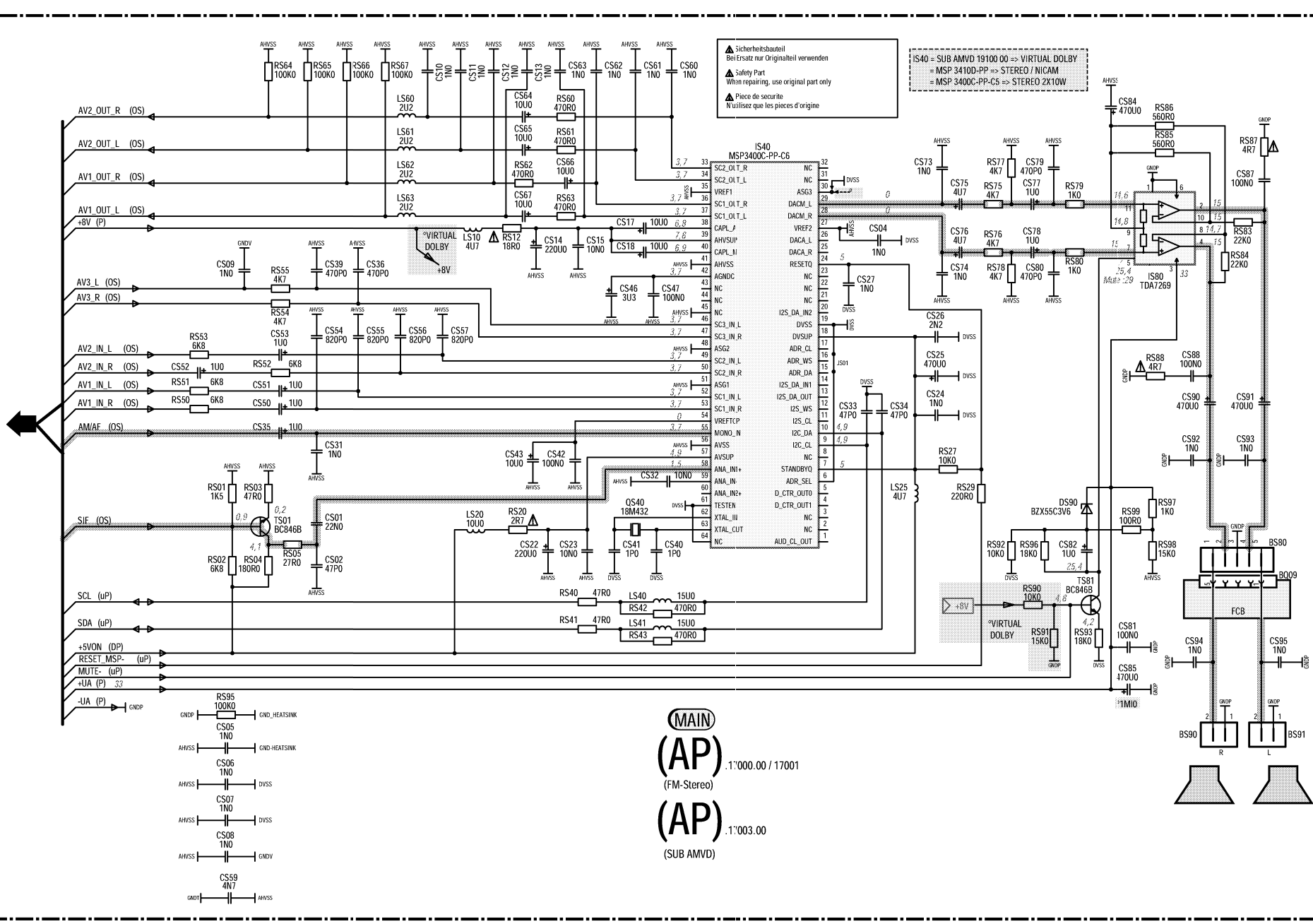


RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO

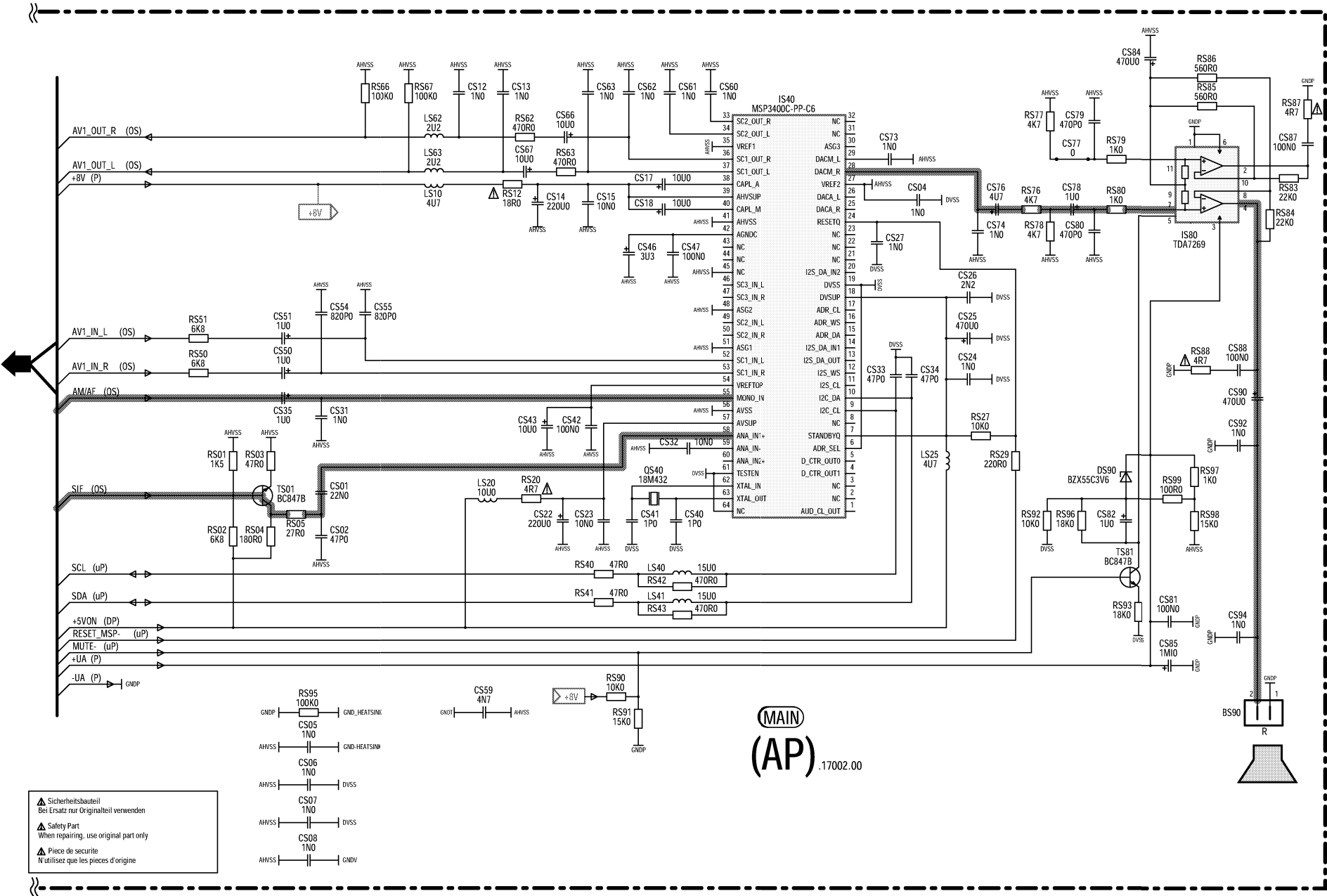




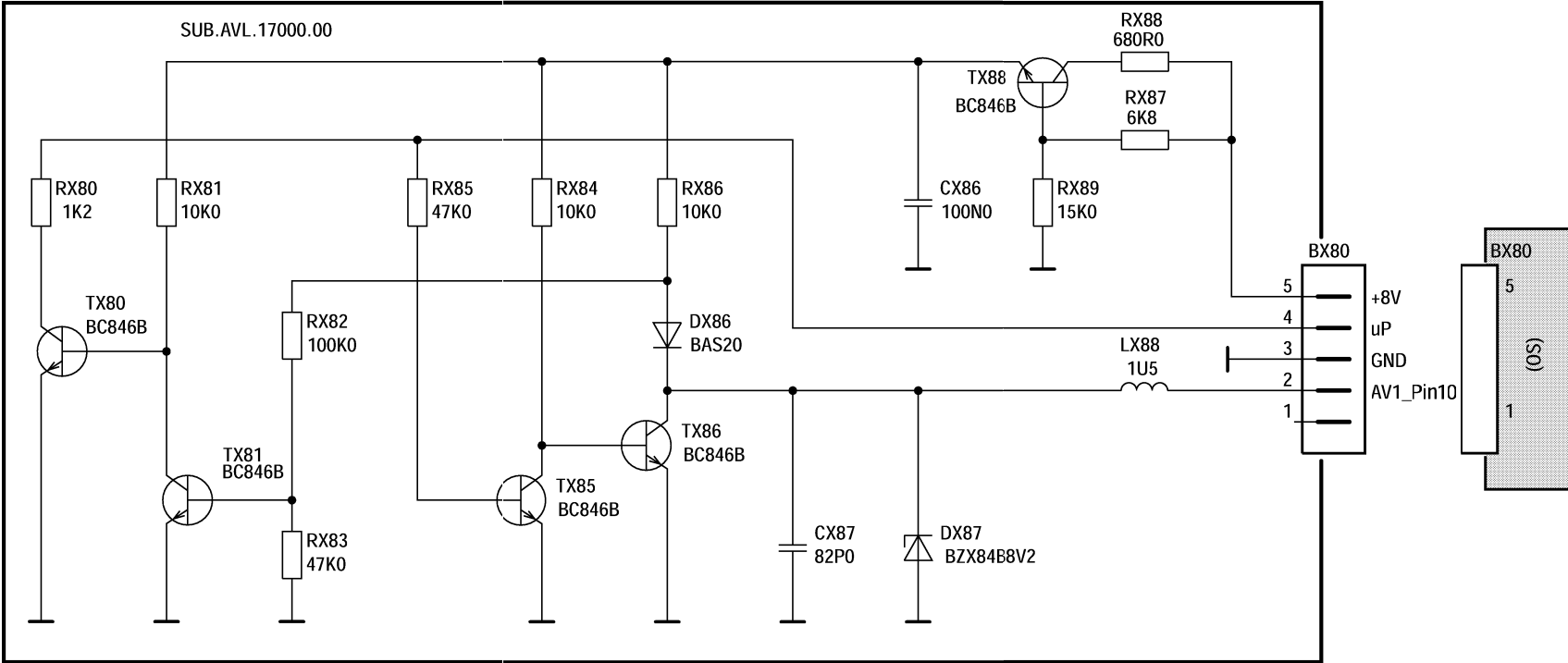
# AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE ESQUEMA DEL AMPLIFICADOR (STEREO)



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



SUB AVL 17000



**POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN**

(5) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground ( PGND ).

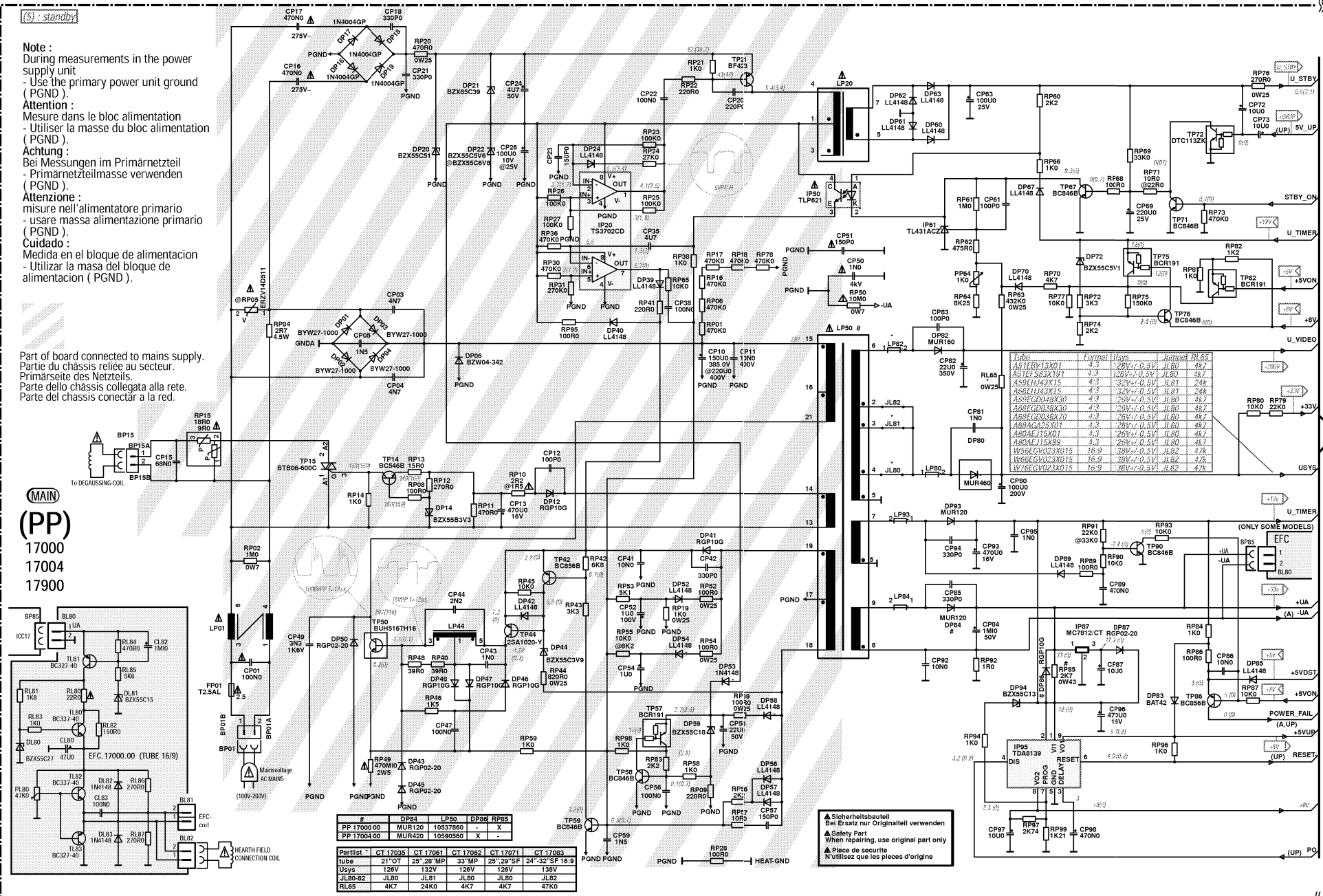
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation  
( PGND ).

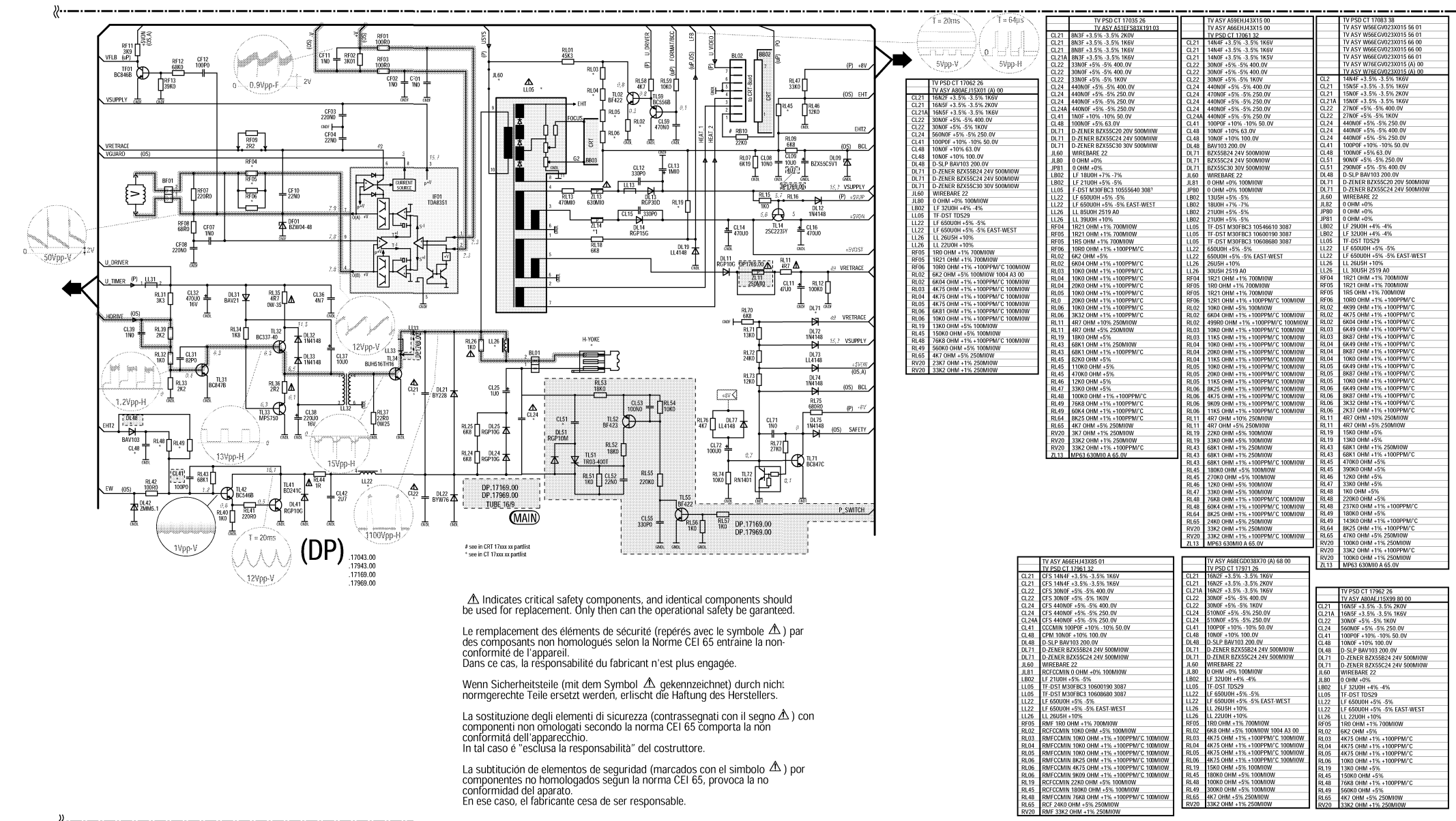
**Achtung:**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden  
( PGND ).

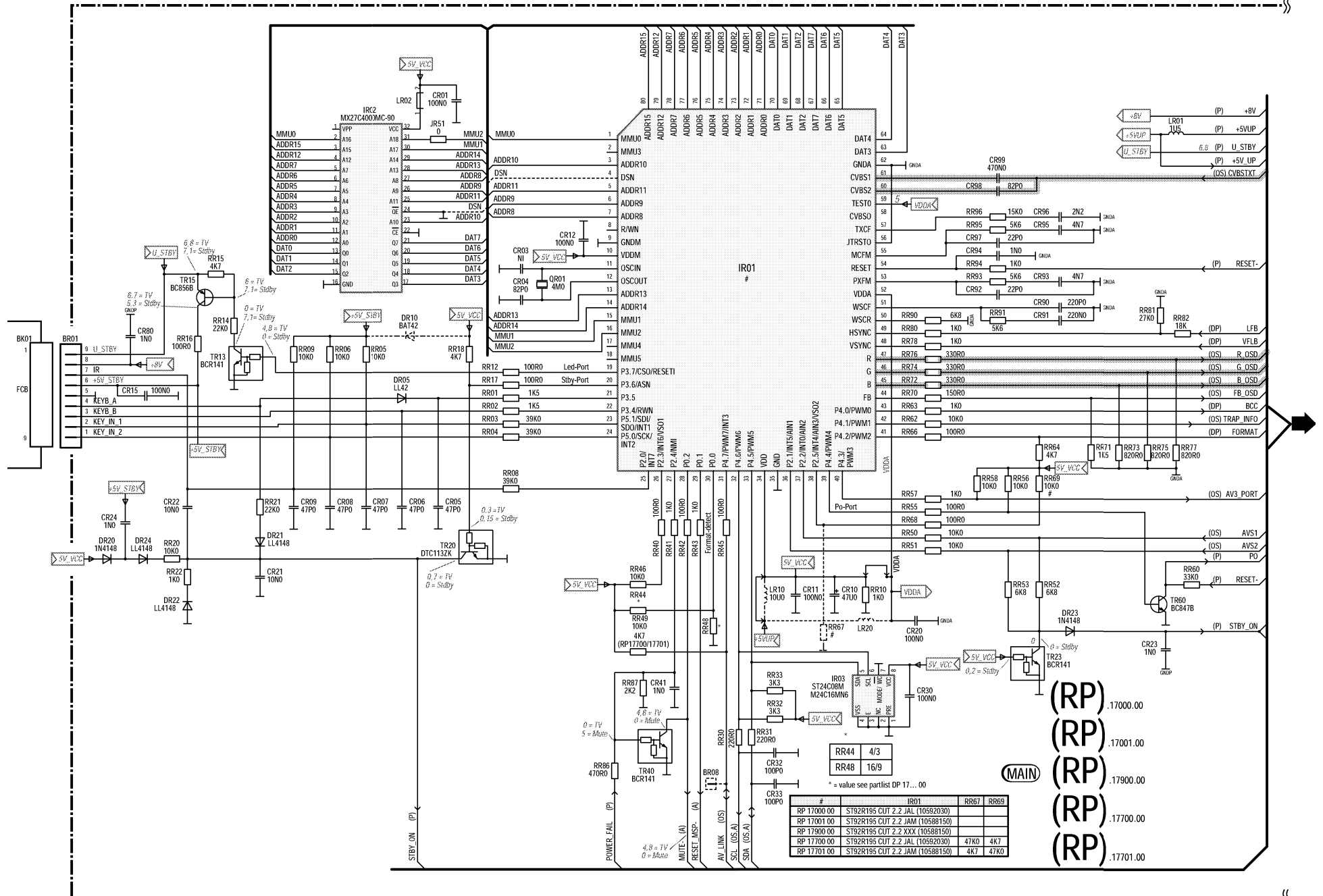
**Attenzione :**  
 misure nell'alimentatore primario  
 - usare massa alimentazione primario  
 ( PGND ).

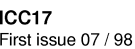
**Cuidado:**  
Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion ( PGND ).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassiss conectar a la red.

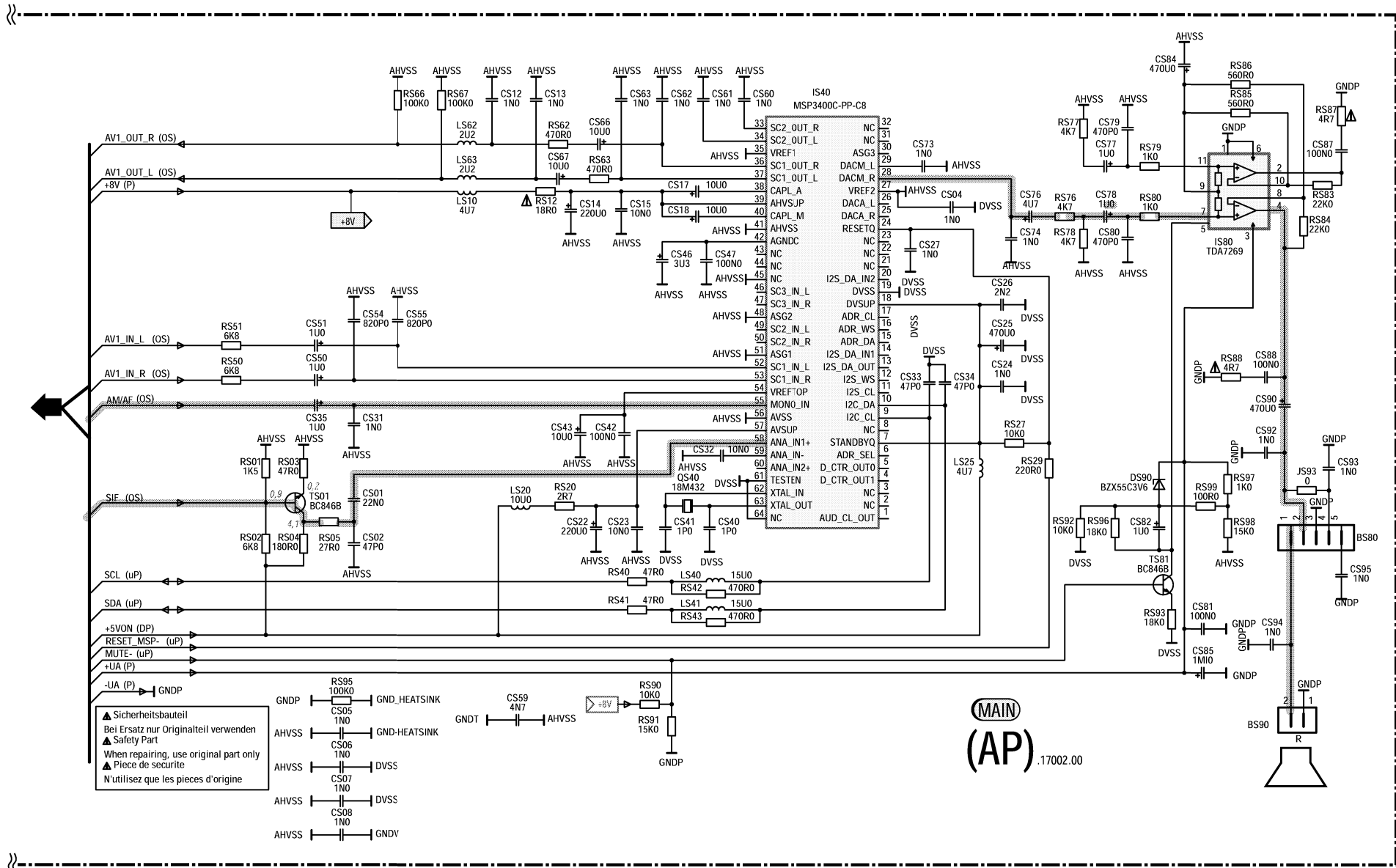








AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)





# POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(S) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground (PGND).

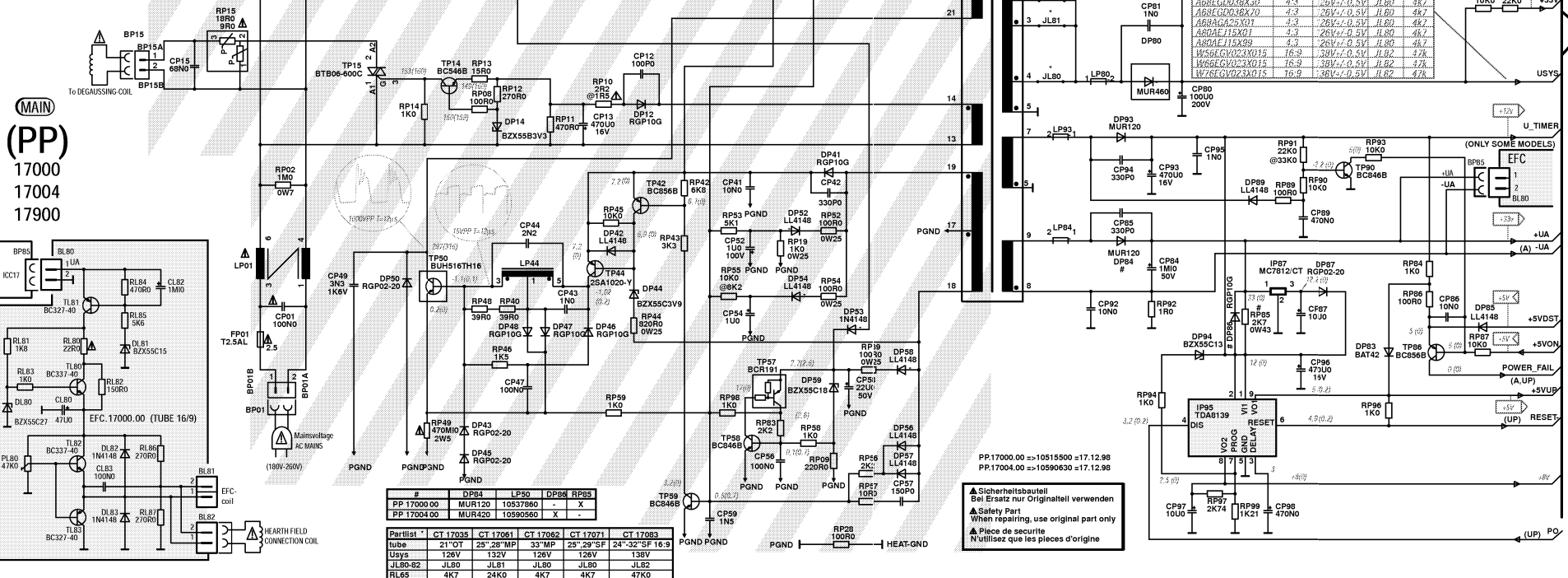
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation (PGND).

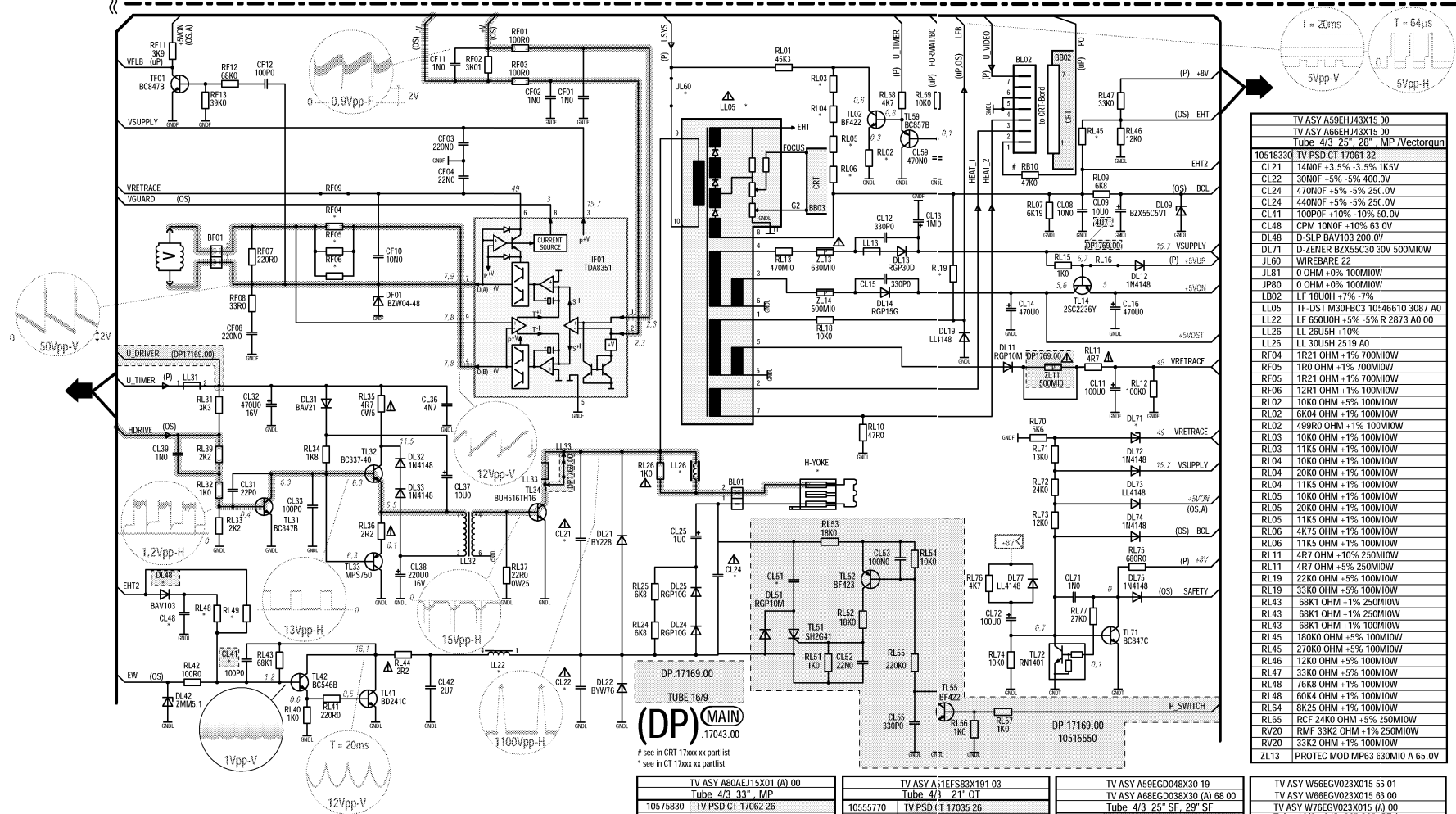
**Achtung :**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden (PGND).

**Attenzione :**  
misure nell'alimentatore primario  
- usare massa alimentazione primario (PGND).

**Cuidado :**  
Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion (PGND).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectar a la red.





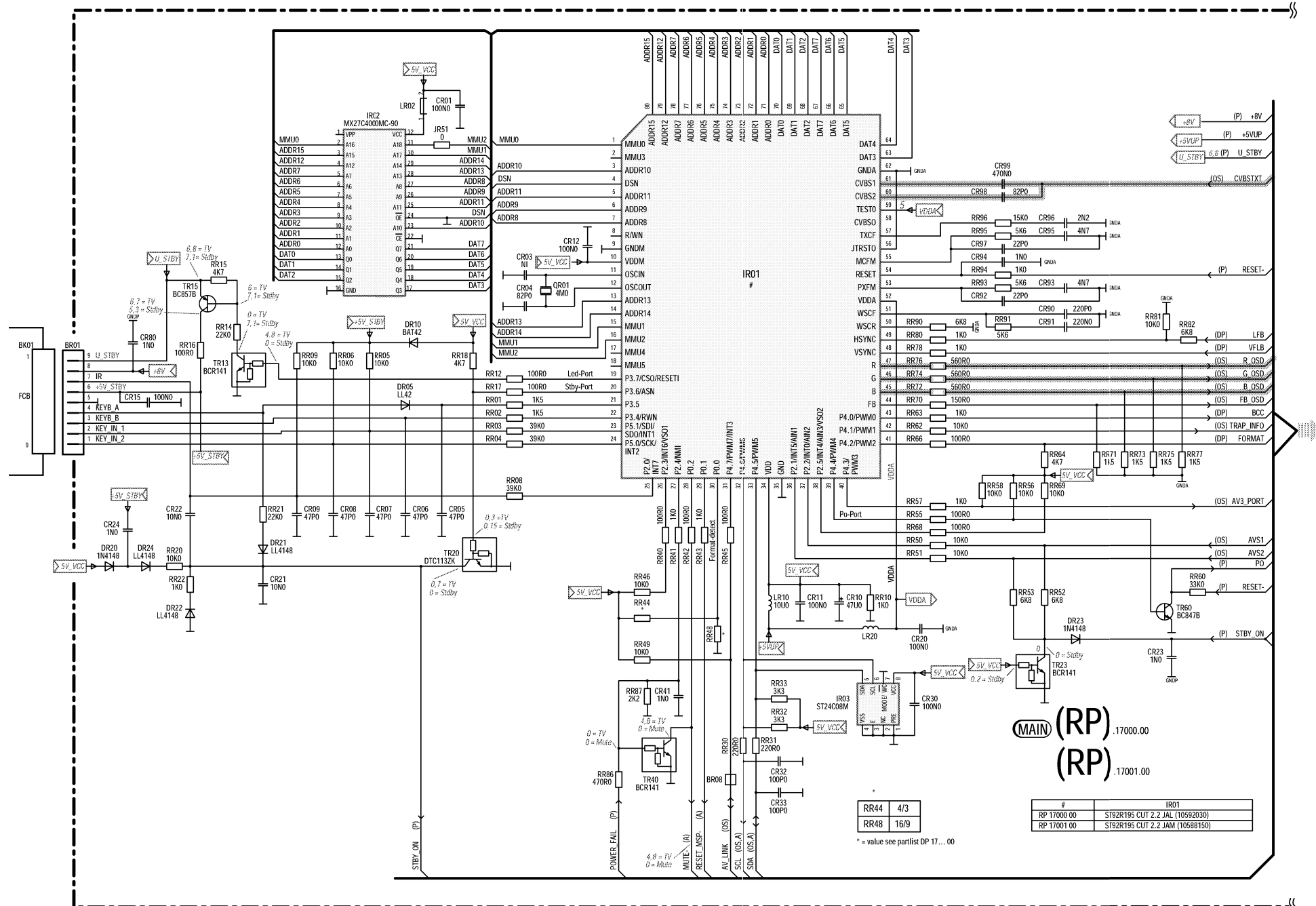
⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.  
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

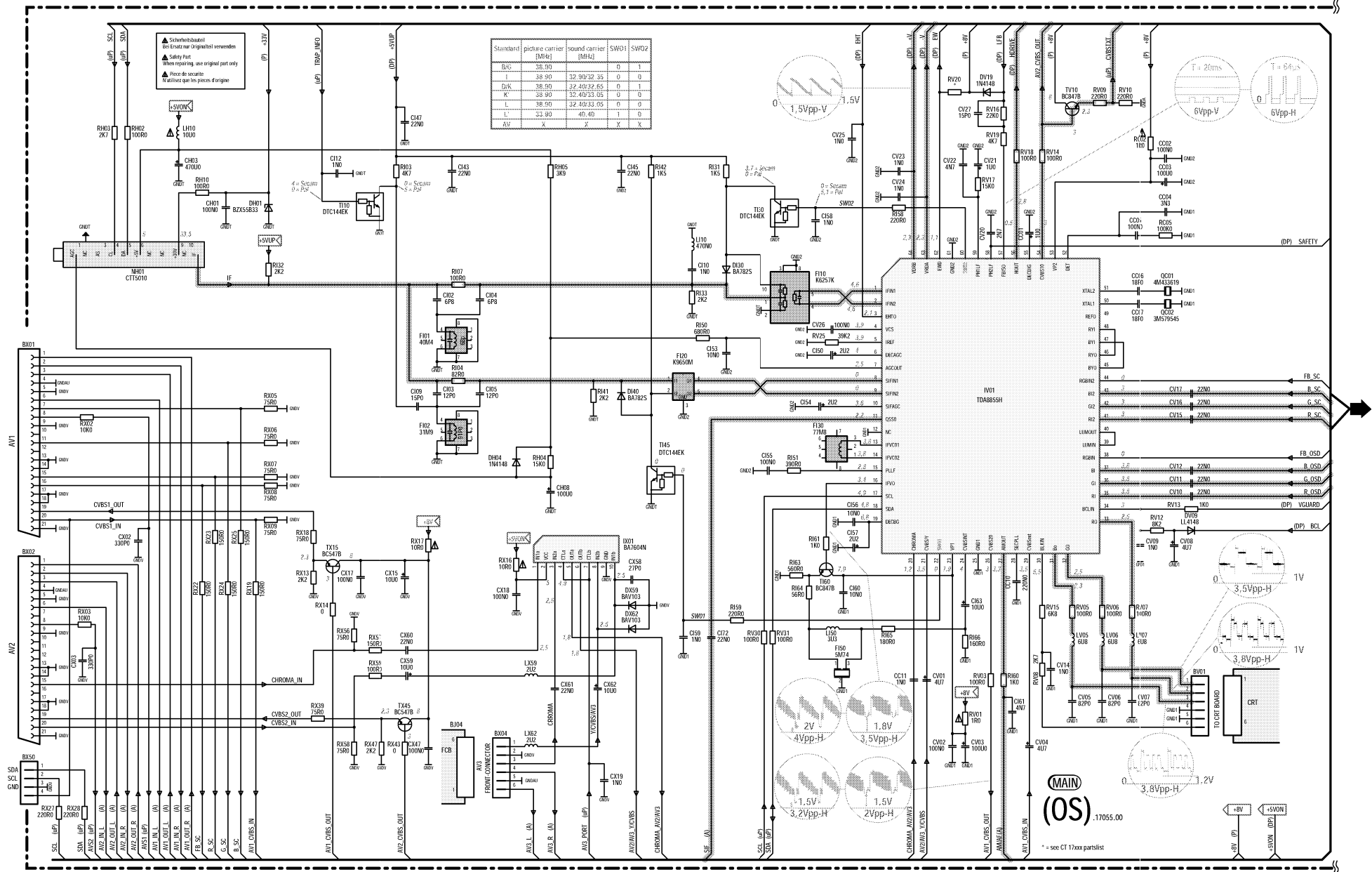
Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.  
In tal caso è "esclusa la responsabilità" del costruttore.

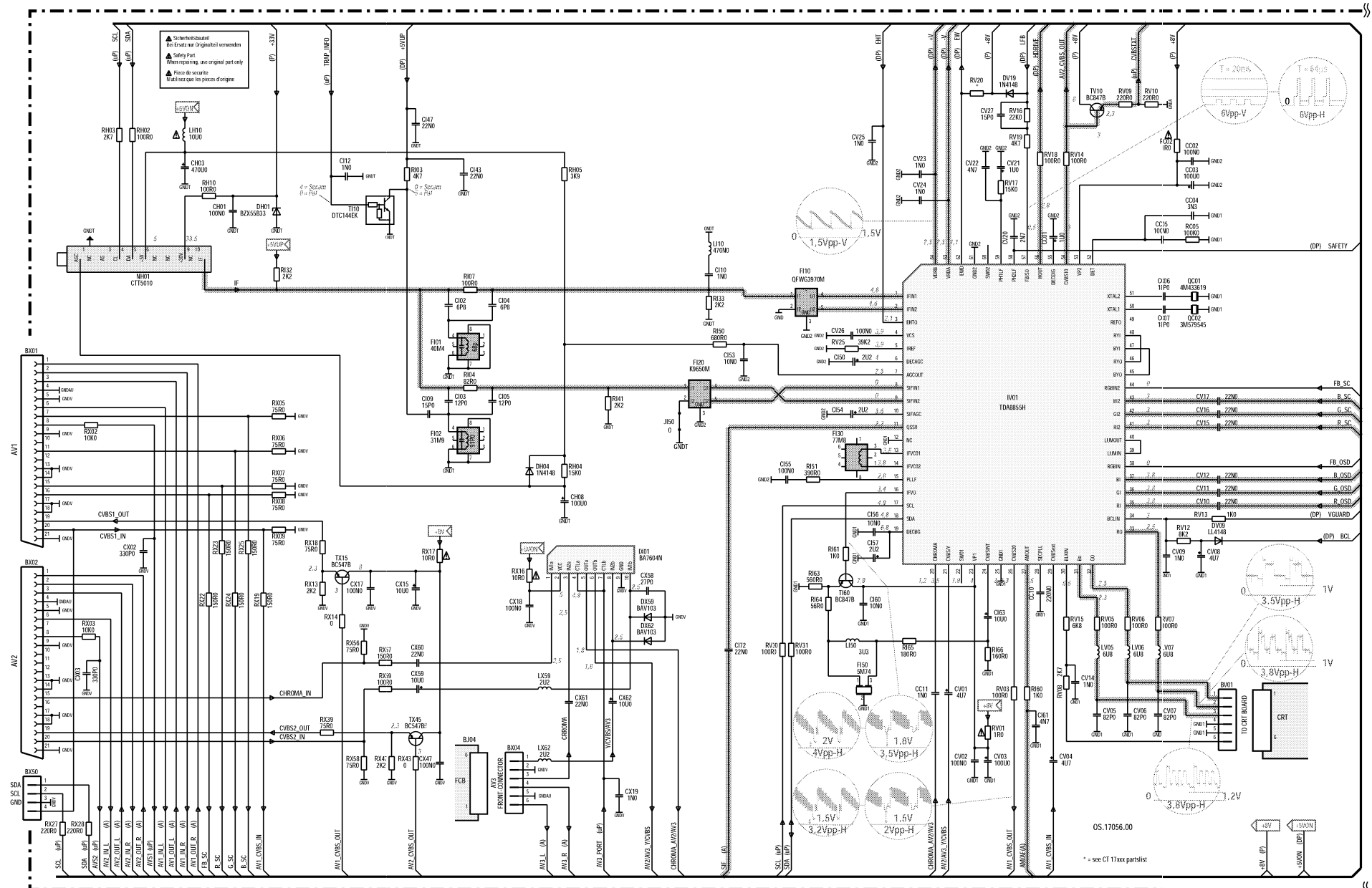
La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.  
En ese caso, el fabricante cesa de ser responsable.



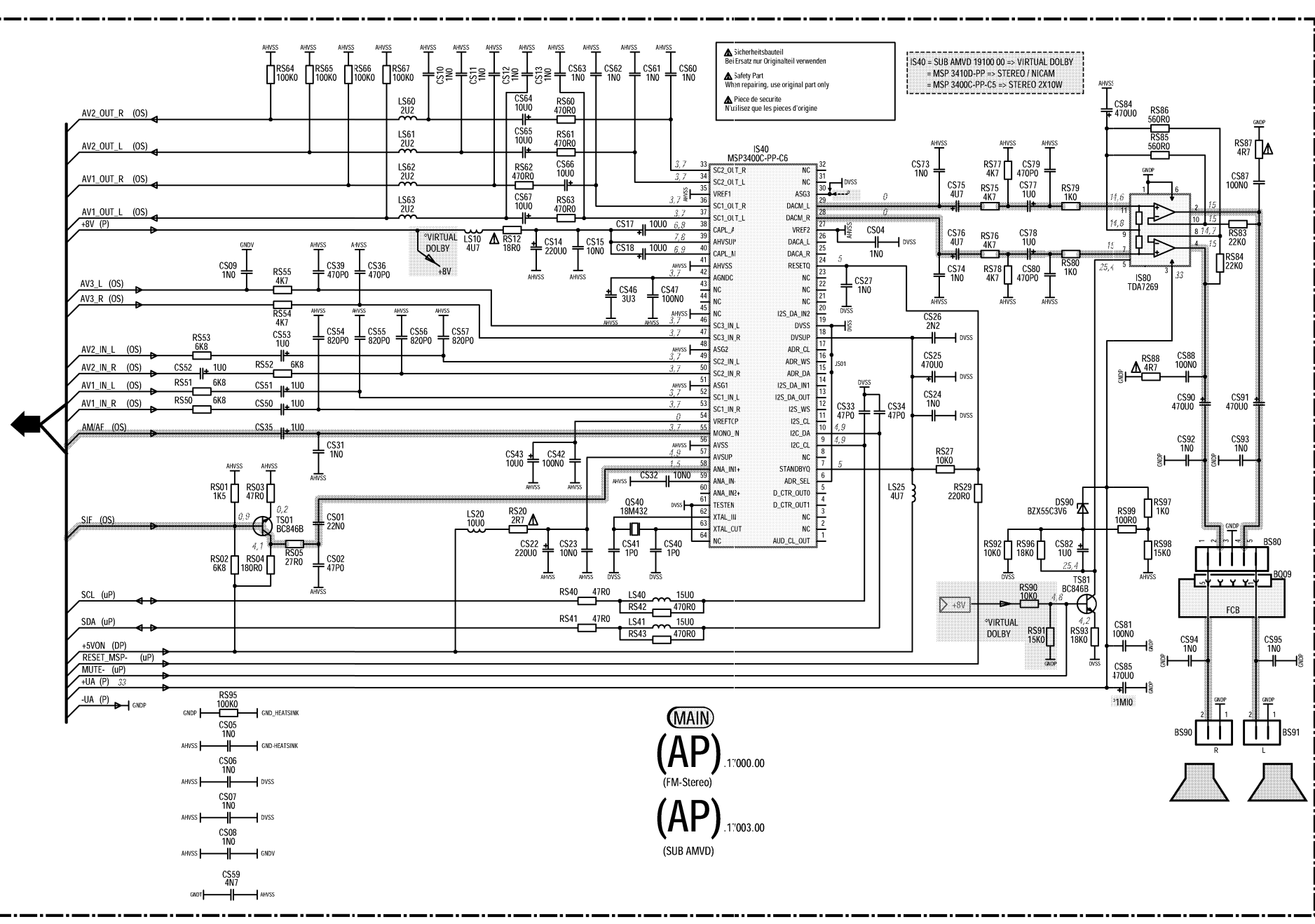
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO



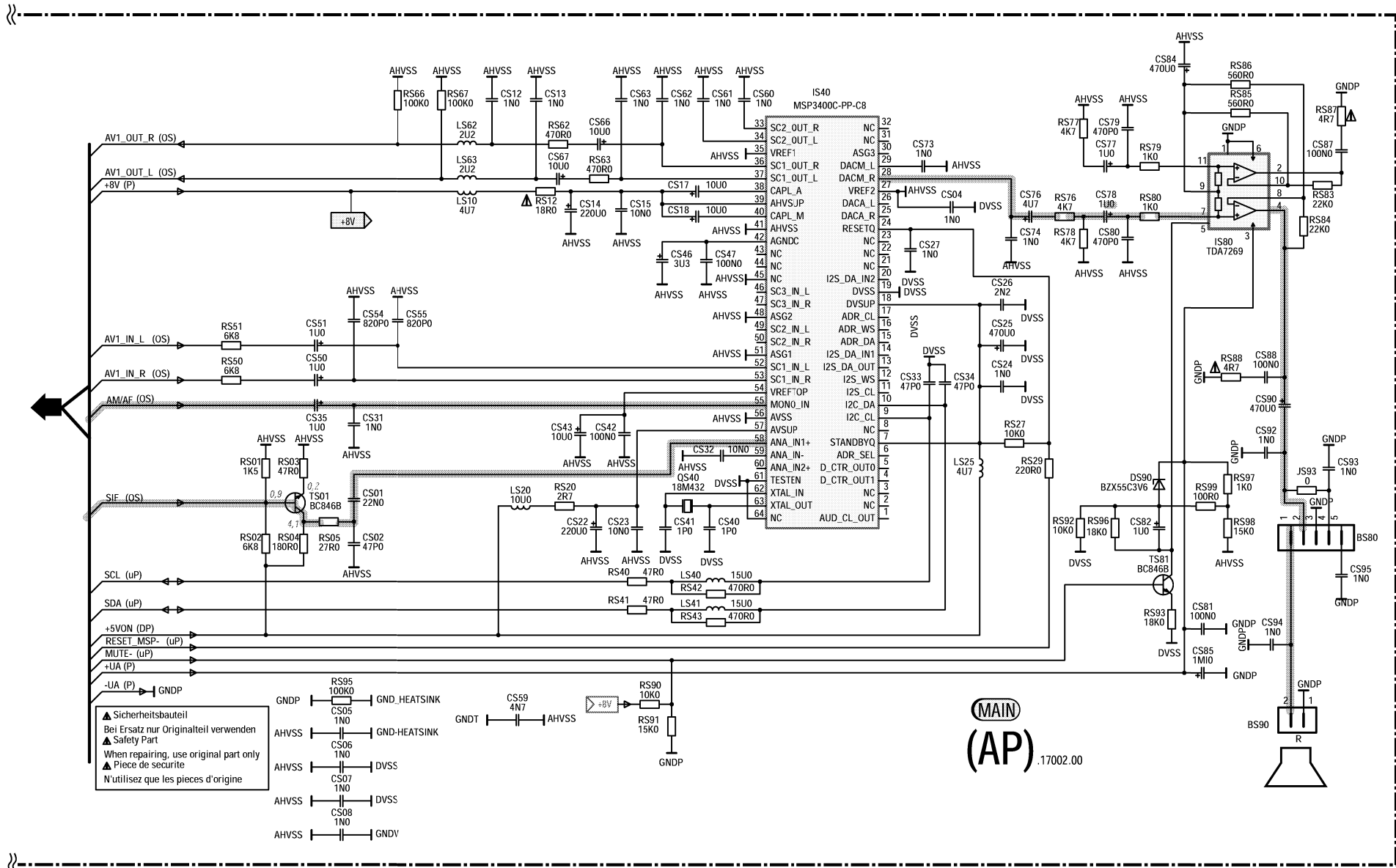
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI/PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE  
ESQUEMA DEL AMPLIFICADOR  
(STEREO)



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



# POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

## Note :

During measurements in the power supply unit

- Use the primary power unit ground ( PGND )

## Attention :

Mesure dans le bloc alimentation

- Utiliser la masse du bloc alimentation ( PGND )

## Achtung :

Bei Messungen im Primärnetzteil

- Primärnetzteilmasse verwenden ( PGND )

## Attenzione :

misure nell'alimentatore primario

- usare massa alimentazione primario ( PGND )

## Cuidado :

Medida en el bloque de alimentacion

- Utilizar la masa del bloque de alimentacion ( PGND )

Part of board connected to mains supply.

Partie du châssis reliée au secteur.

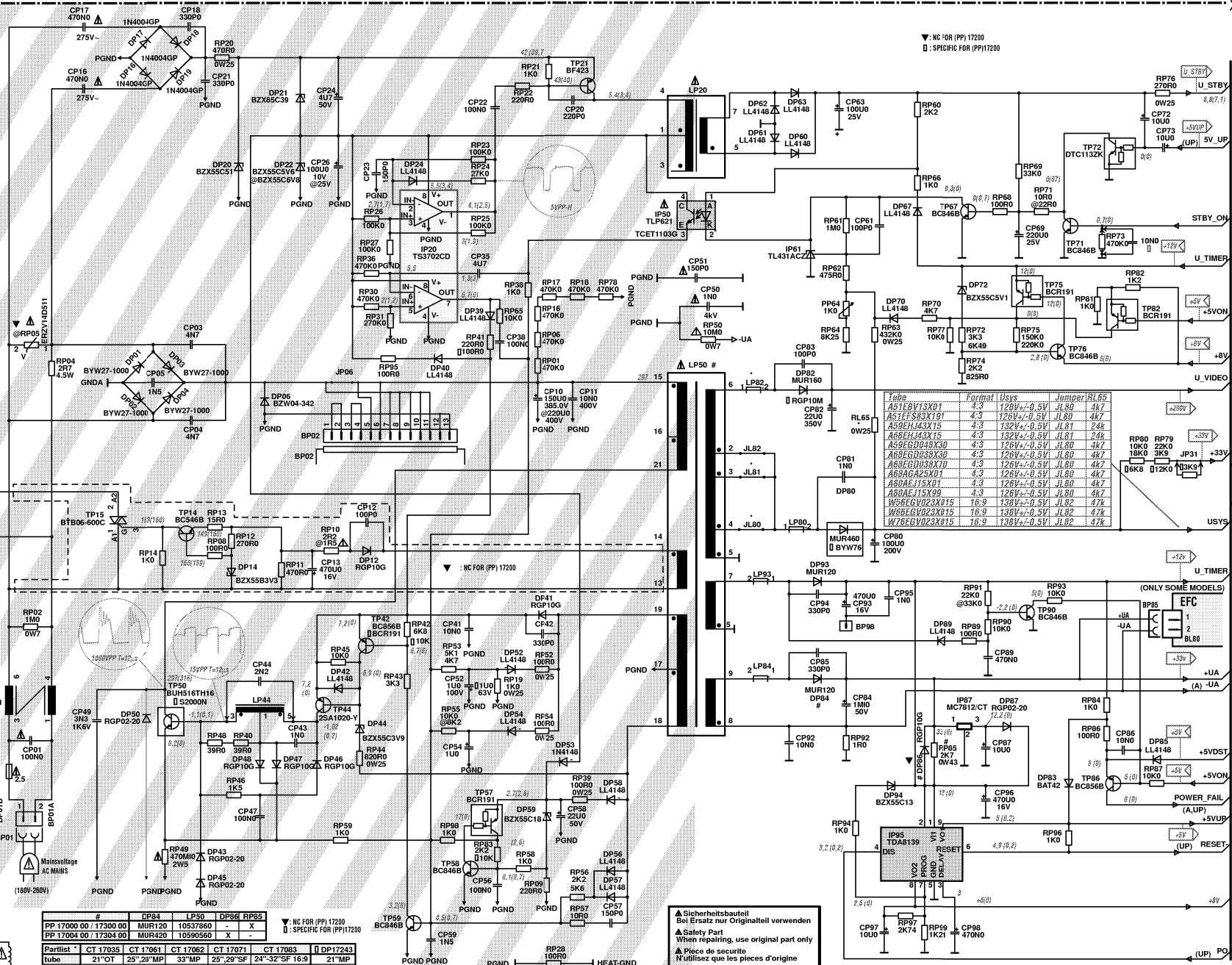
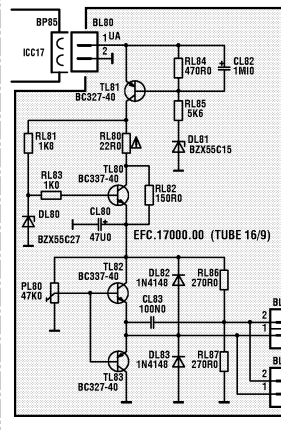
Primärseite des Netzteils.

Parte dello chassis collegata alla rete.

Parte del chassis conectar a la red.

(MAIN)  
(PP)

17000  
17004  
17200  
17300  
17304  
17900

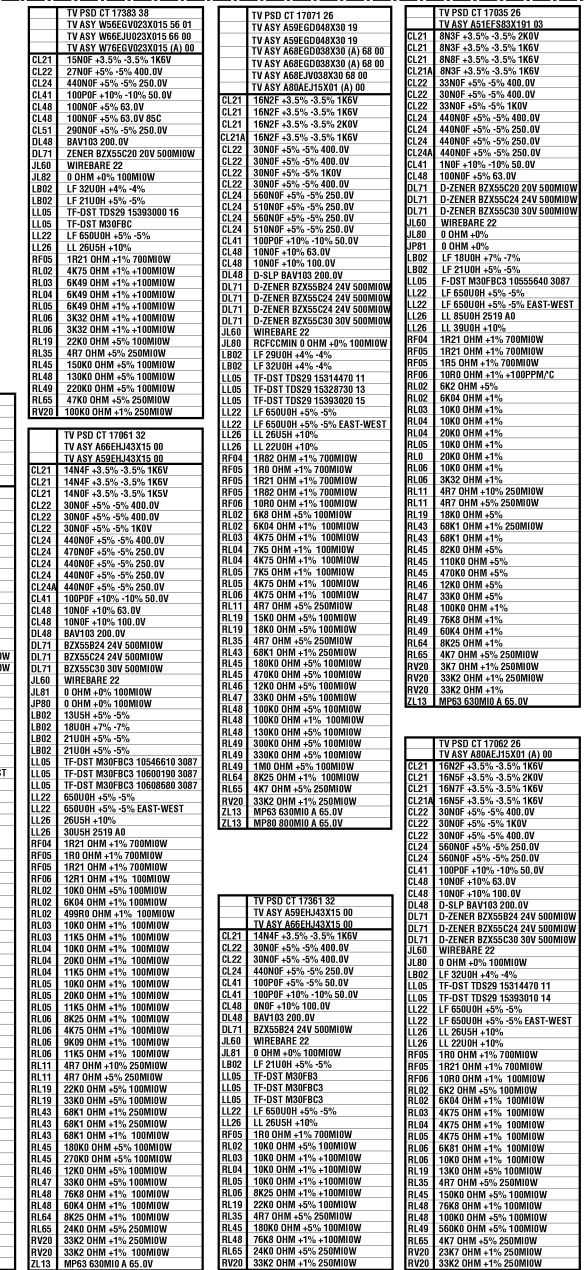



▽: NC FOR (PP) 17200  
□: SPECIFIC FOR (PP) 17200

Tube	Format	Usys	Jumper	RL65
A51EBV13X01	4.3	126V+/-0.5V	JL80	4K7
A51EF83X191	4.3	126V+/-0.5V	JL80	4K7
A59EH43X15	4.3	132V+/-0.5V	JL81	24K
A66EH43X15	4.3	132V+/-0.5V	JL81	24K
A59EGD048X30	4.3	126V+/-0.5V	JL80	4K7
A66EGD038X30	4.3	126V+/-0.5V	JL80	4K7
A66EGD038X70	4.3	126V+/-0.5V	JL80	4K7
A66AG25X01	4.3	126V+/-0.5V	JL80	4K7
A66AG15X01	4.3	126V+/-0.5V	JL80	4K7
A66AG15X09	4.3	126V+/-0.5V	JL80	4K7
W56EGV023X015	16.9	138V+/-0.5V	JL82	47K
W66EGV023X015	16.9	138V+/-0.5V	JL82	47K
W76EGV023X015	16.9	138V+/-0.5V	JL82	47K

▲ Sicherheitsbauteil  
Bei Ersatz nur Originalteil verwenden  
▲ Safety Part  
When repairing, use original part only  
▲ Pièce de sécurité  
N'utilisez que les pièces d'origine



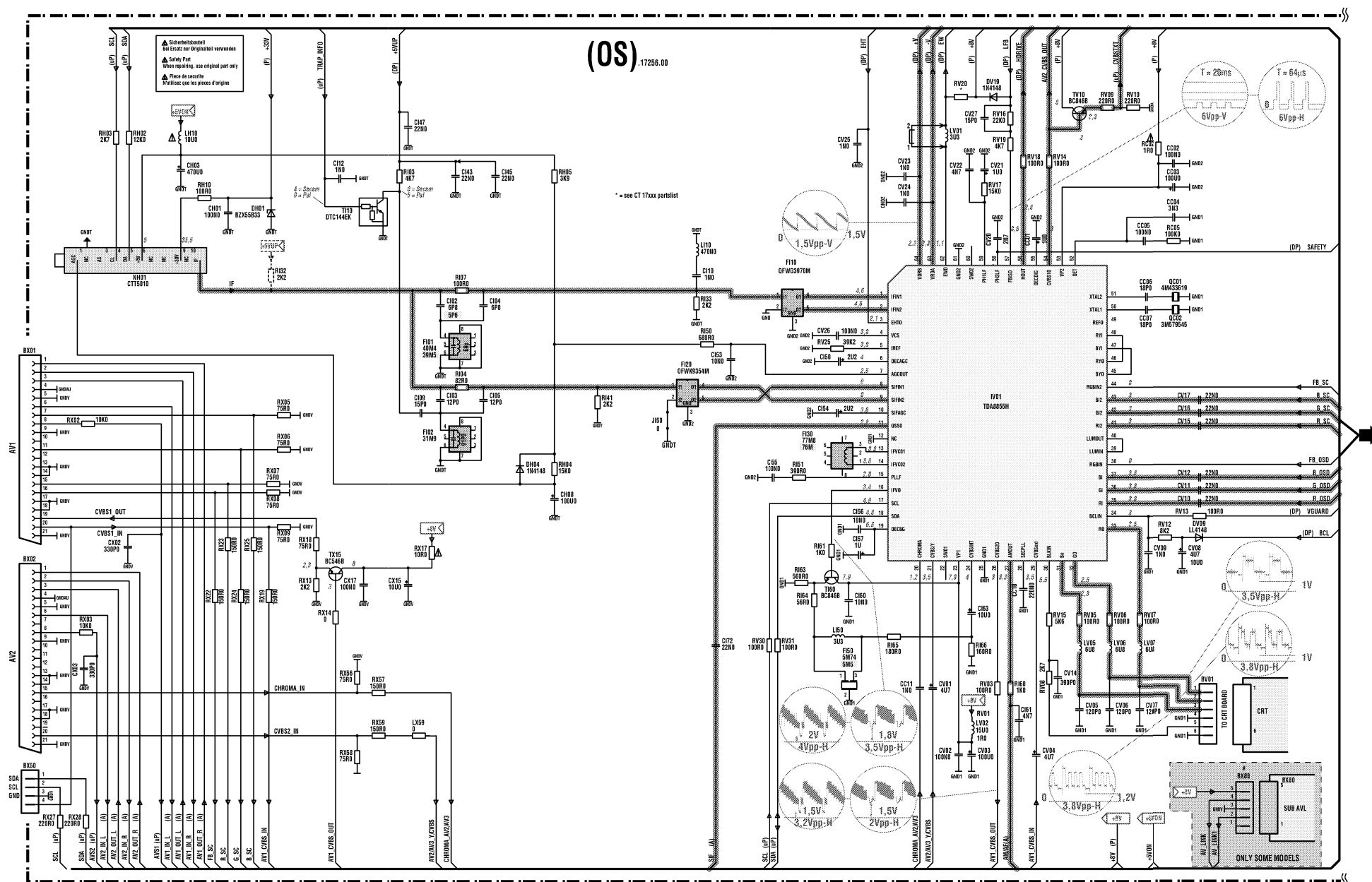


La sustitución de elementos de seguridad (marcados con el símbolo ) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.  
En ese caso, el fabricante cesa de ser responsable.

»



RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



»-



**(S) : standby**

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground (PGND).

**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation (PGND).

**Achtung :**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden (PGND).

**Attenzione :**  
misura nell'alimentatore primario  
- usare massa alimentazione primario (PGND).

**Cuidado :**  
Medida en el bloque de alimentación  
- Utilizar la masa del bloque de alimentación (PGND).

Part of board connected to mains supply.  
Partie du chassis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectar a la red.

**MAIN (PP)**  
17000  
17004  
17900

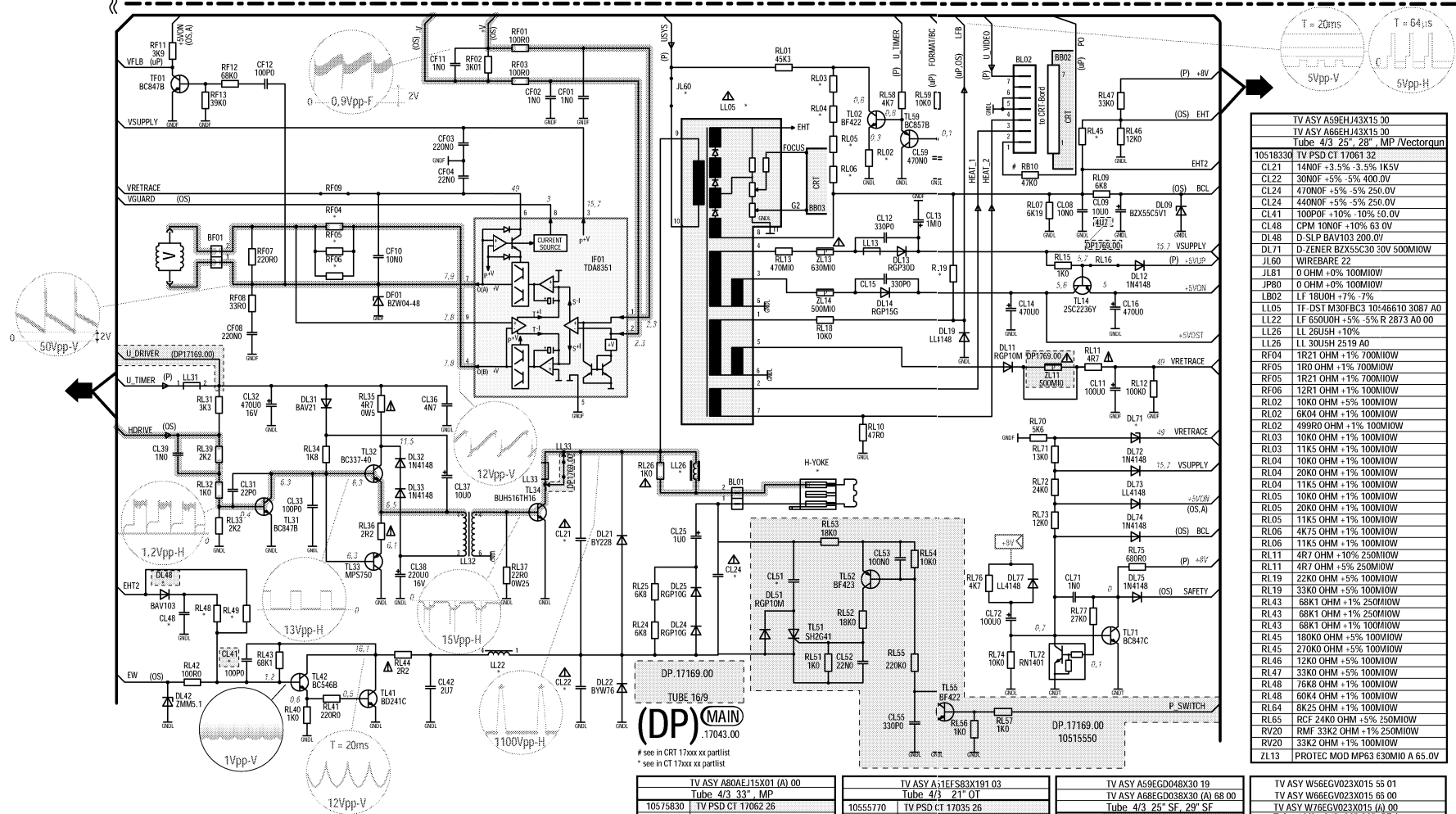
**Partlist**

Partlist	CT 17095	CT 17061	CT 17062	CT 17071	CT 17083
tube	21" 01	25" 28" MP	33" MP	25" 29" SF	24" 32" SF 16.9
Usys	126V	132V	126V	126V	138V
LL80-82	LL80	LL81	LL80	LL80	LL82
RL65	4K7	24K0	4K7	4K7	47K0

**PP 17000 00** MUR120 10537860 - X  
**PP 17004 00** MUR420 10590560 X -

**PP 17000 00** ≥ 10515500 ≥ 17.12.98  
**PP 17004 00** ≥ 10590630 ≥ 17.12.98

**⚠ Sicherheitsbauteil**  
Bei Ersatz nur Originalteil verwenden  
**⚠ Safety Part**  
When repairing, use original part only  
**⚠ Pièce de sécurité**  
N'utilisez que les pièces d'origine



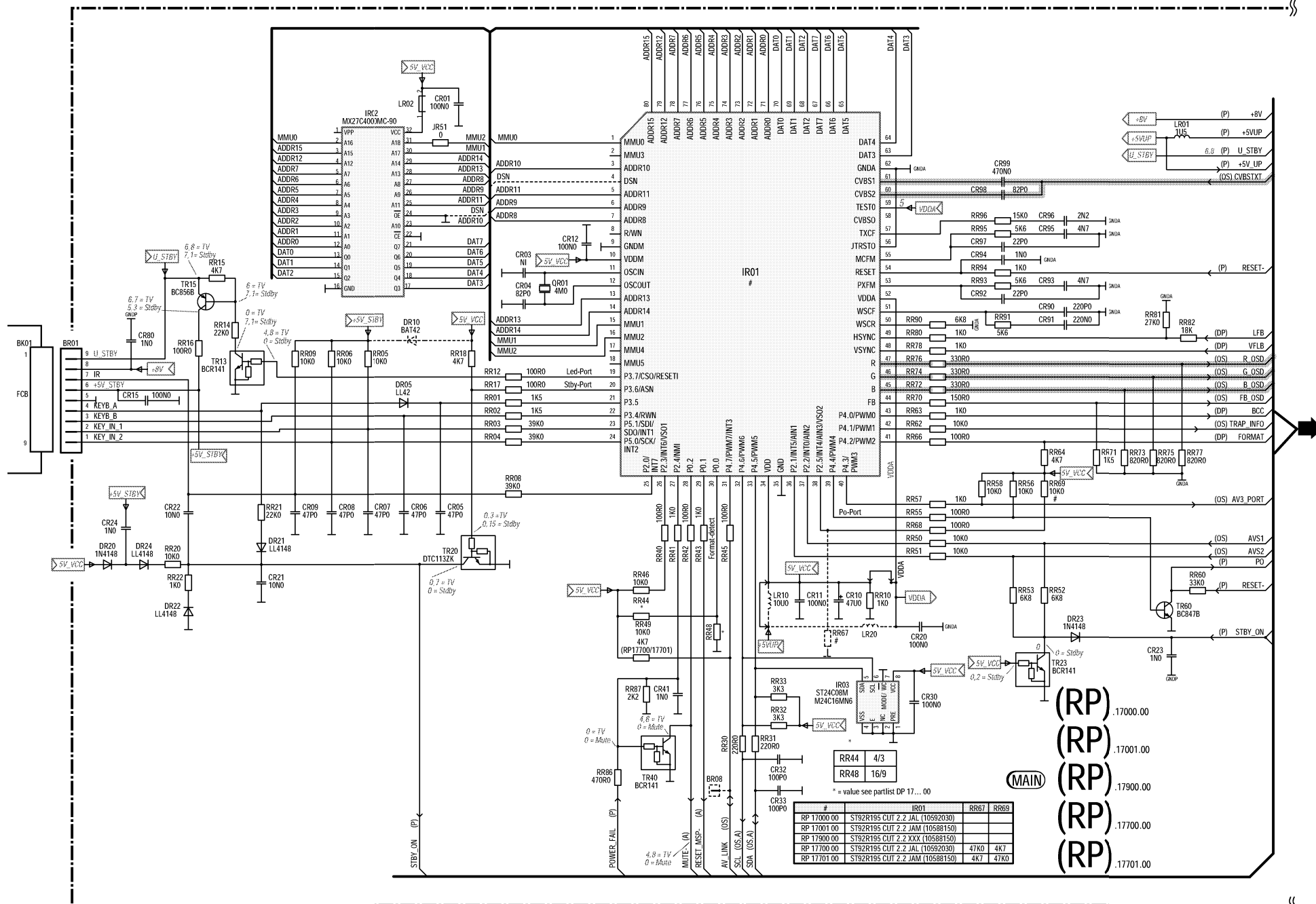
⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

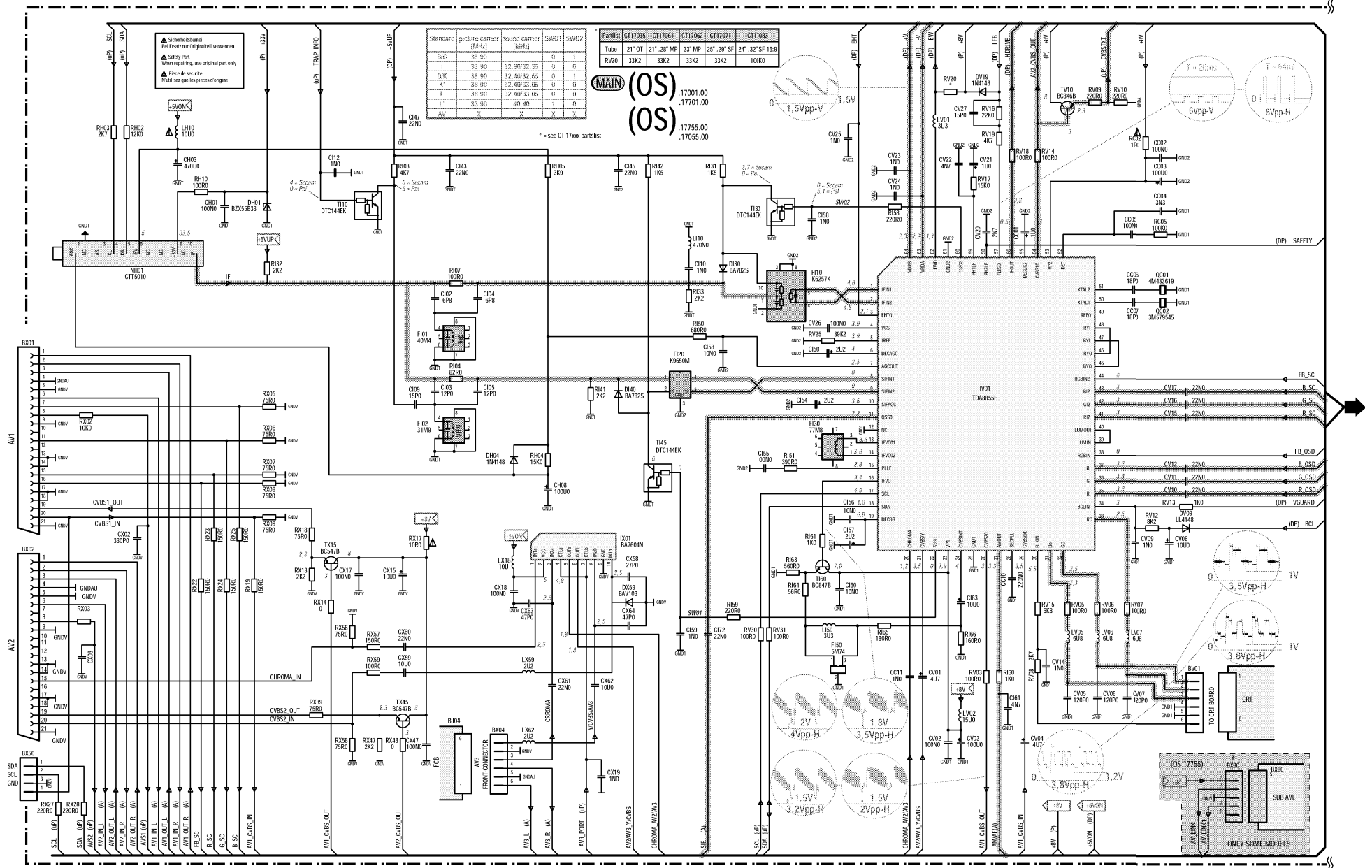
Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.  
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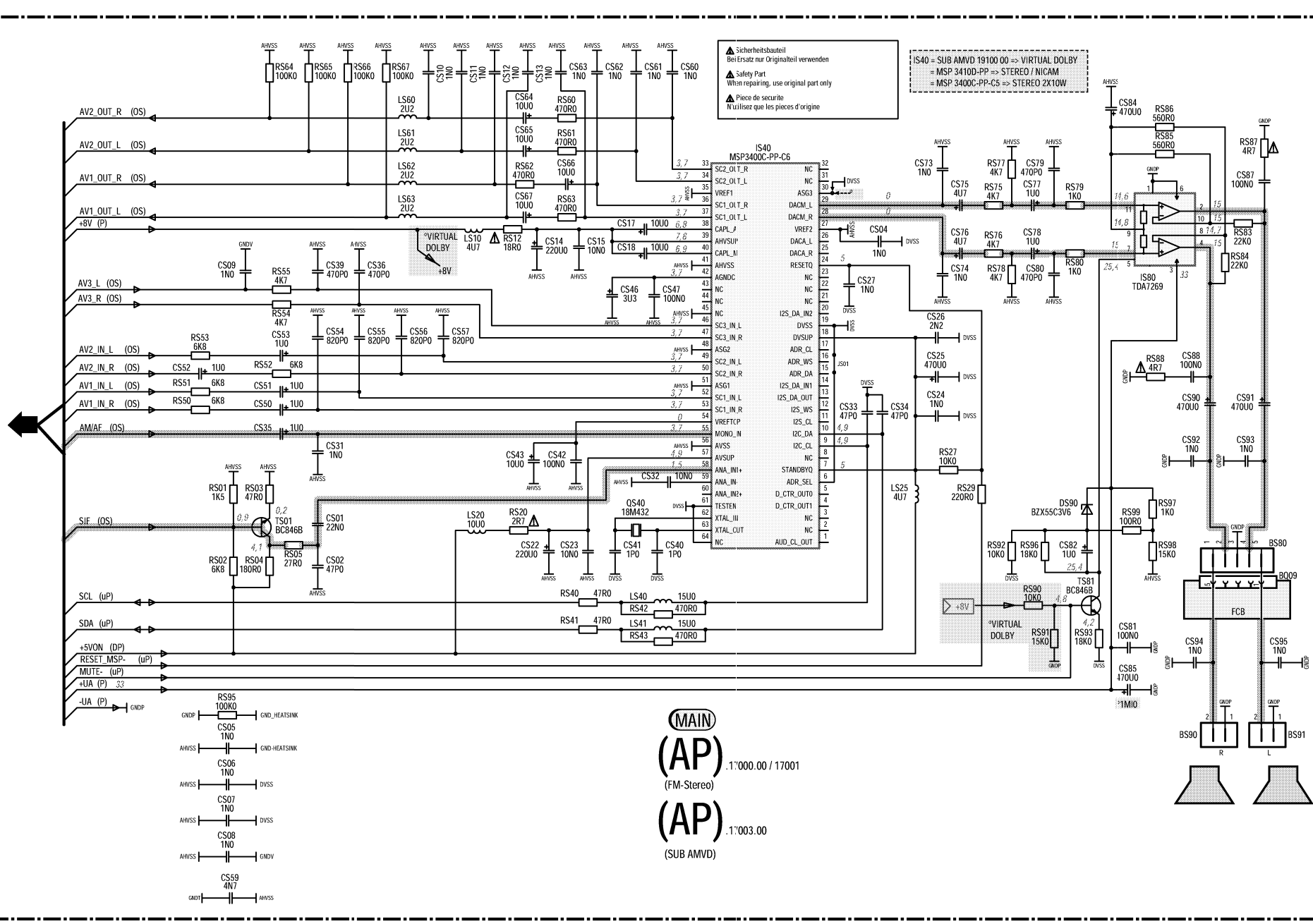
La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.  
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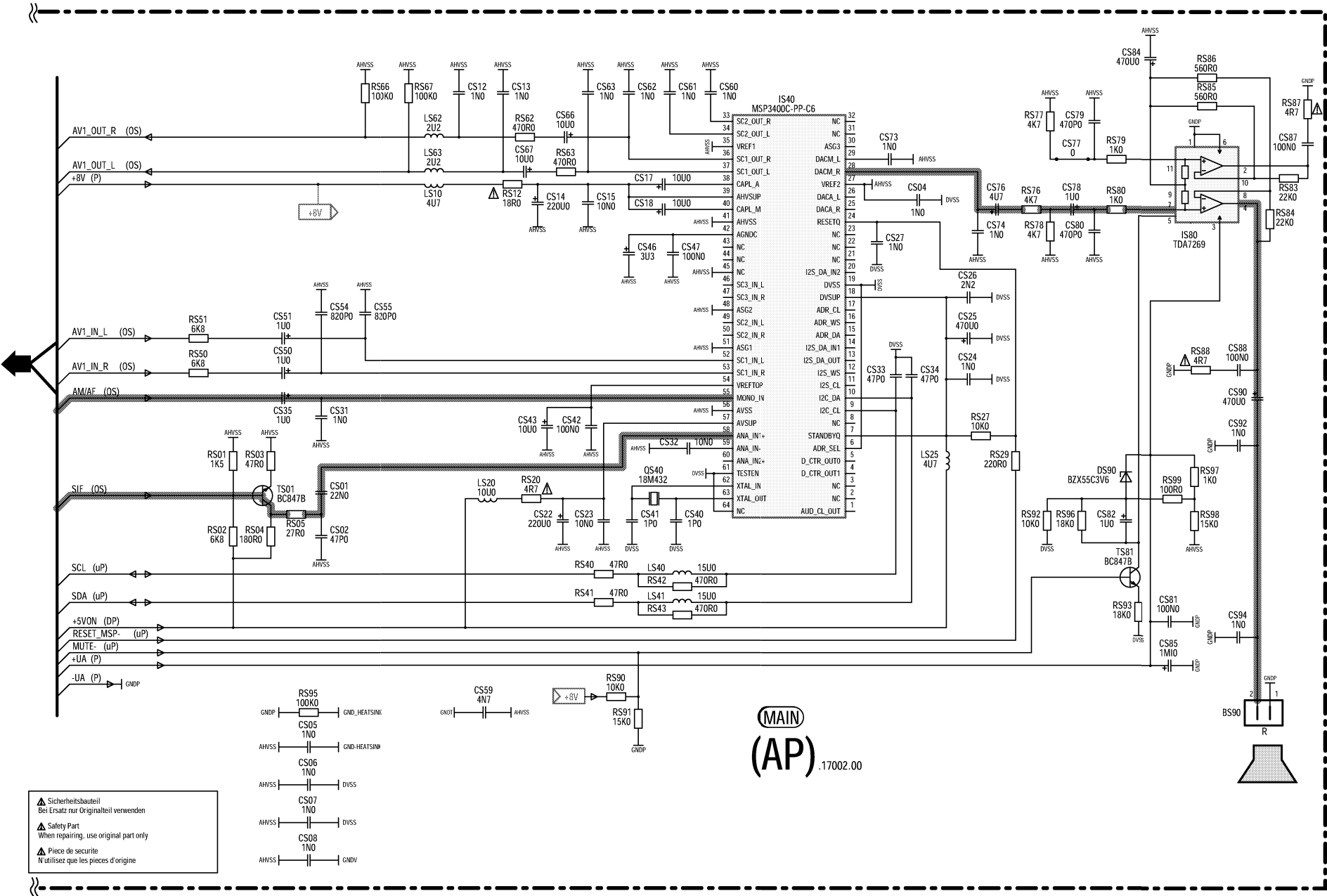




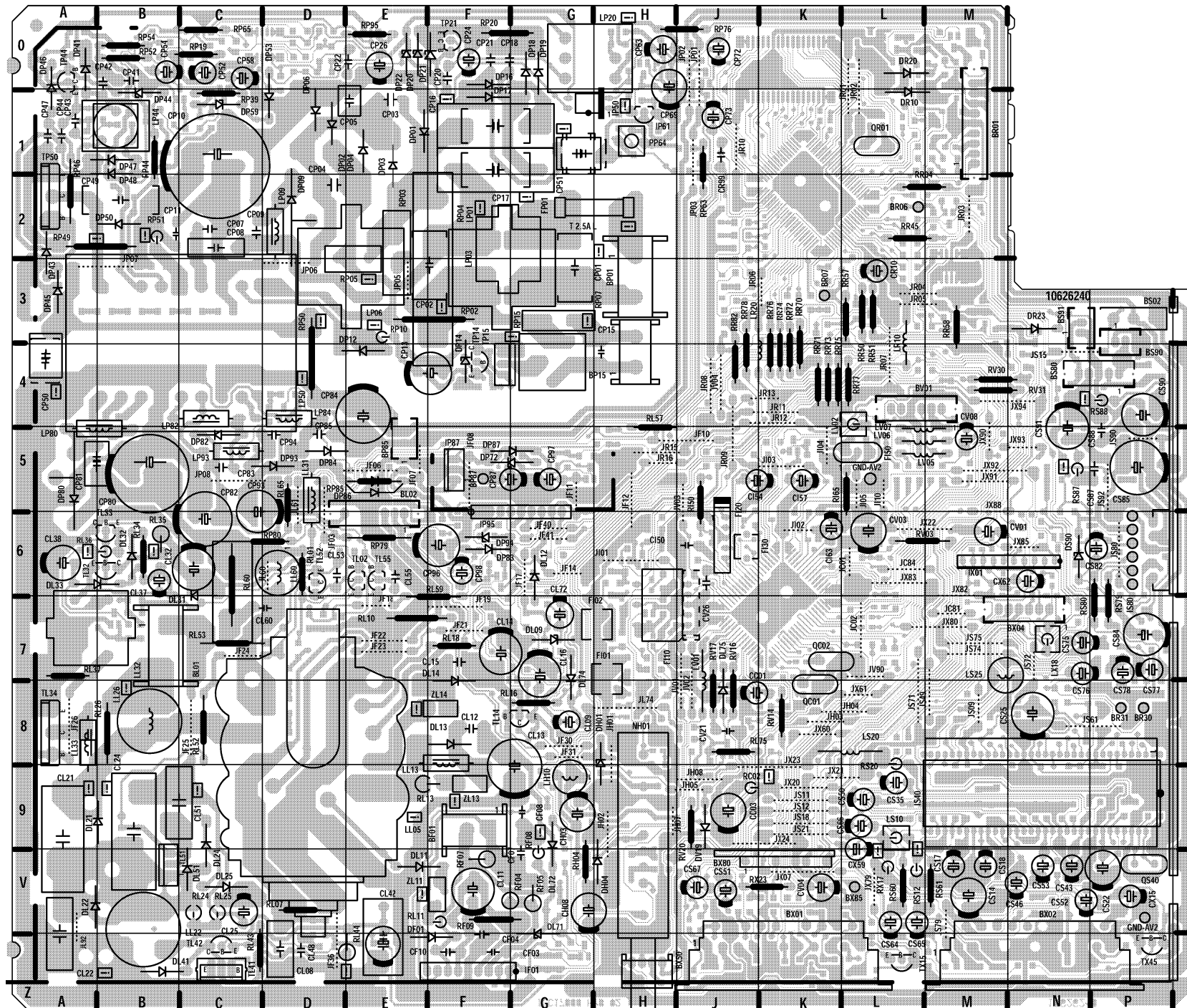
# AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE ESQUEMA DEL AMPLIFICADOR (STEREO)



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)

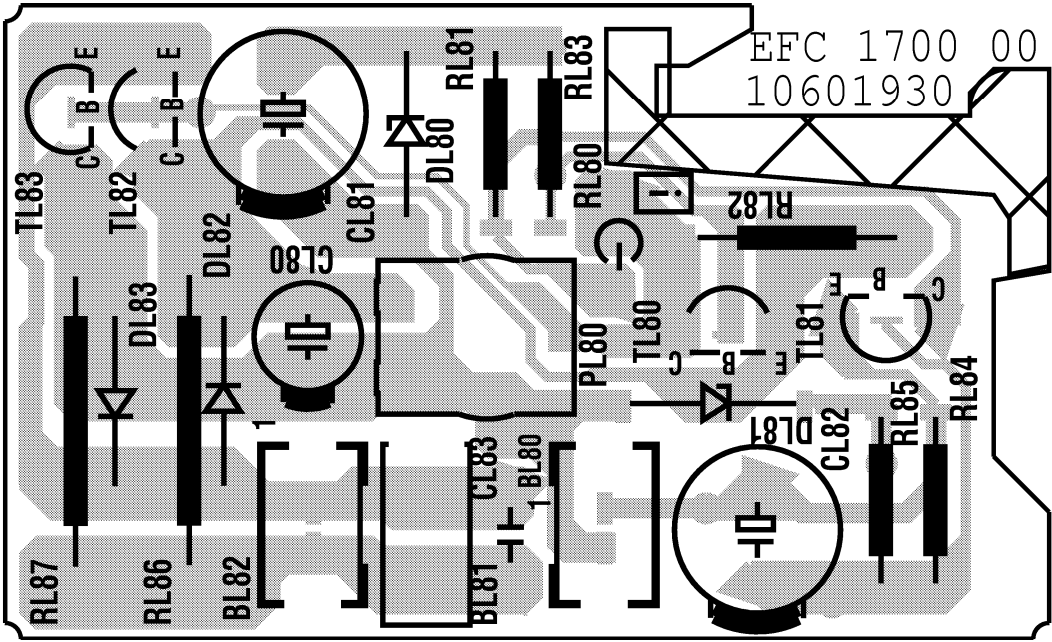


COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

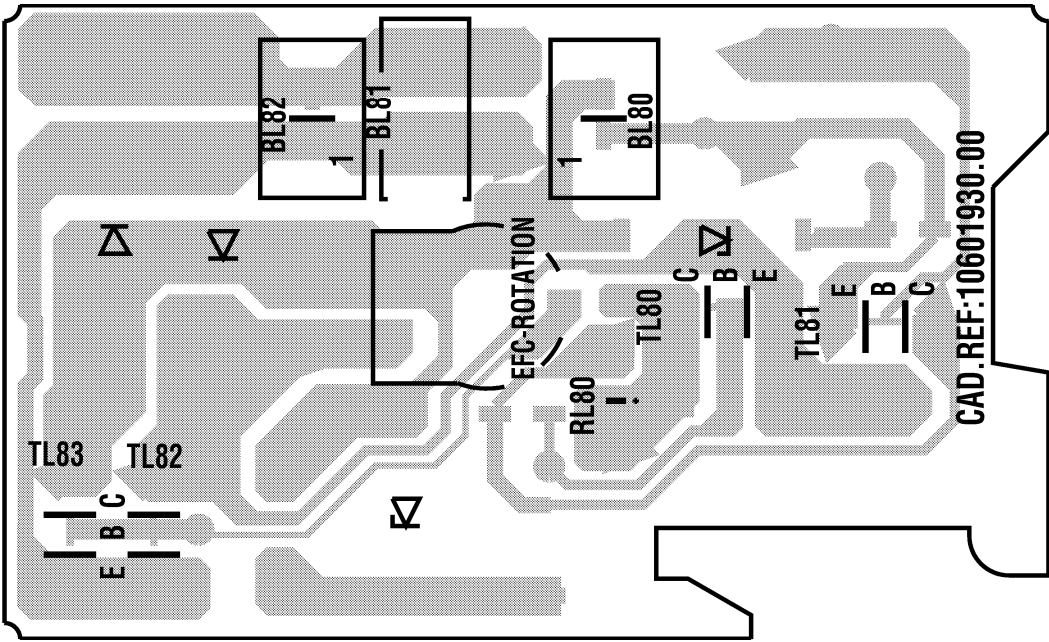


EFC 17000  
EARTH-FIELD CORRECTION BOARD

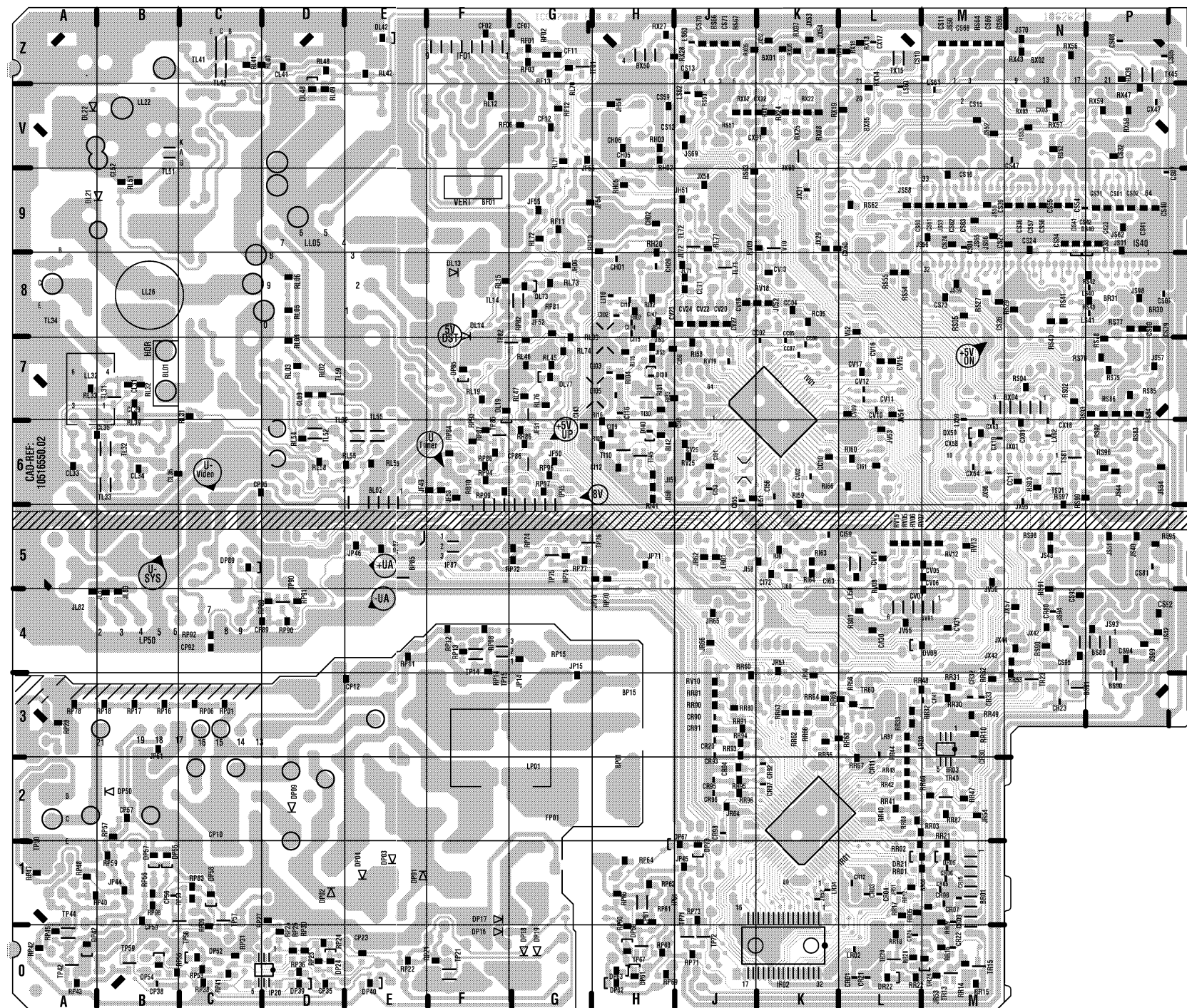
COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSEITE - LATO COMPONENTI  
LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS







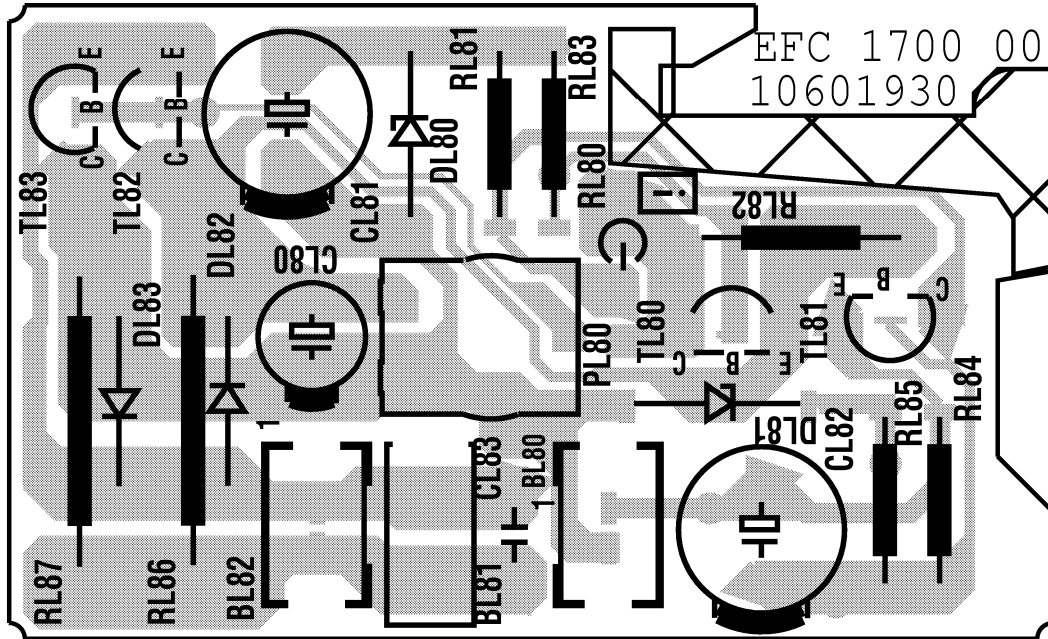
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



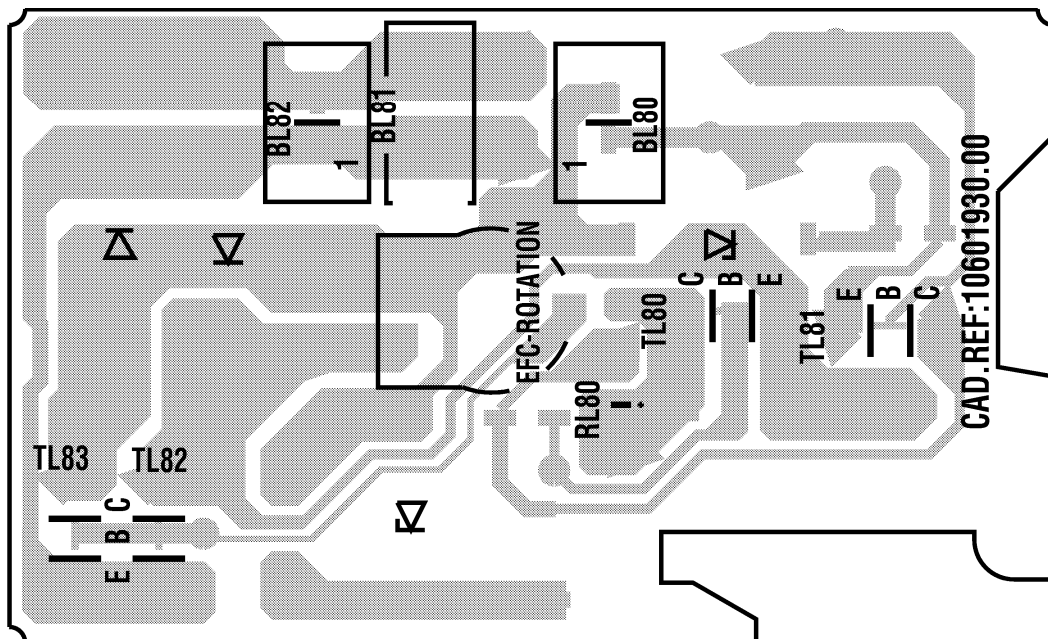


# EFC 17000 EARTH-FIELD CORRECTION BOARD

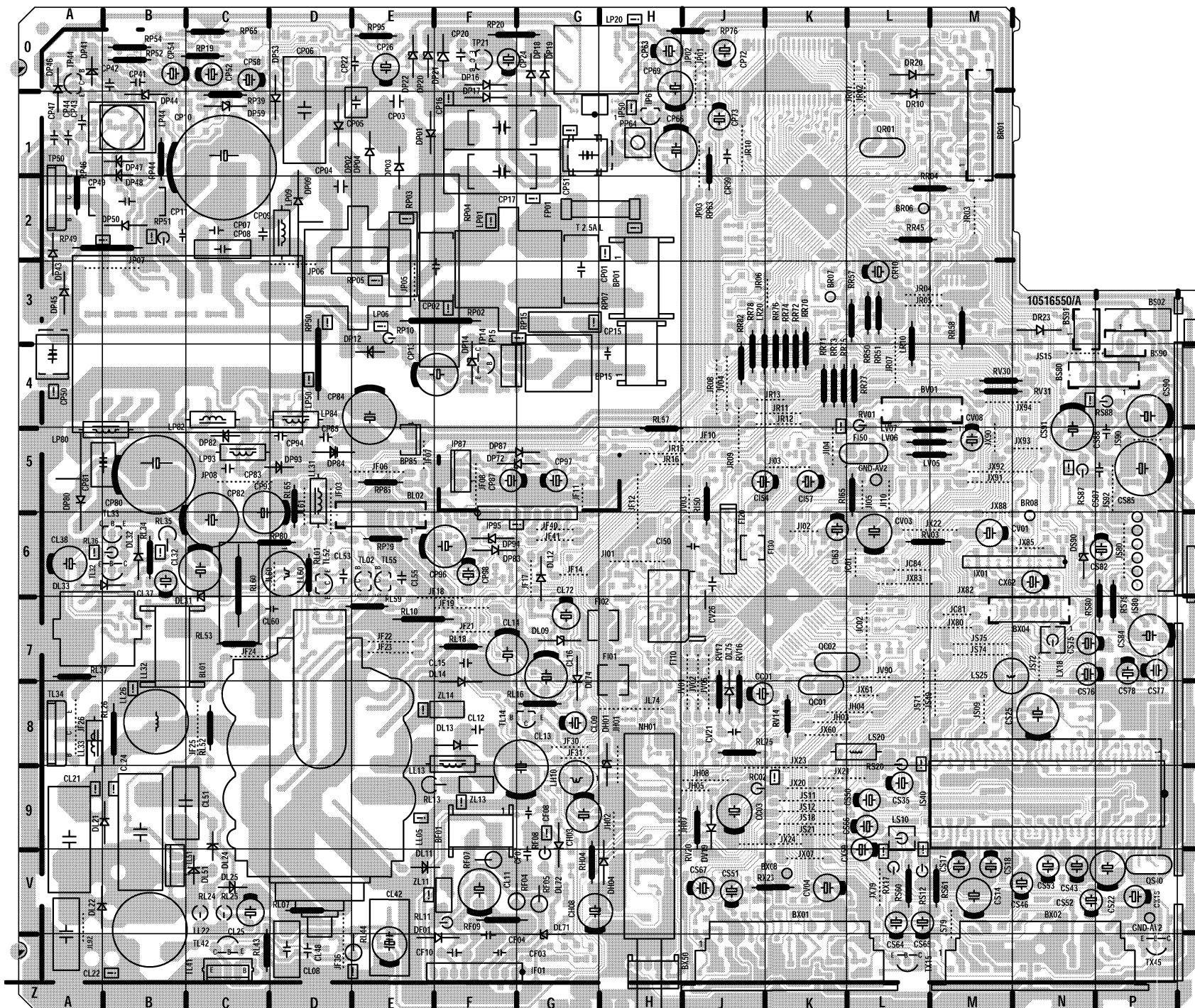
COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSEITE - LATO COMPONENTI  
LADO COMPONENTES

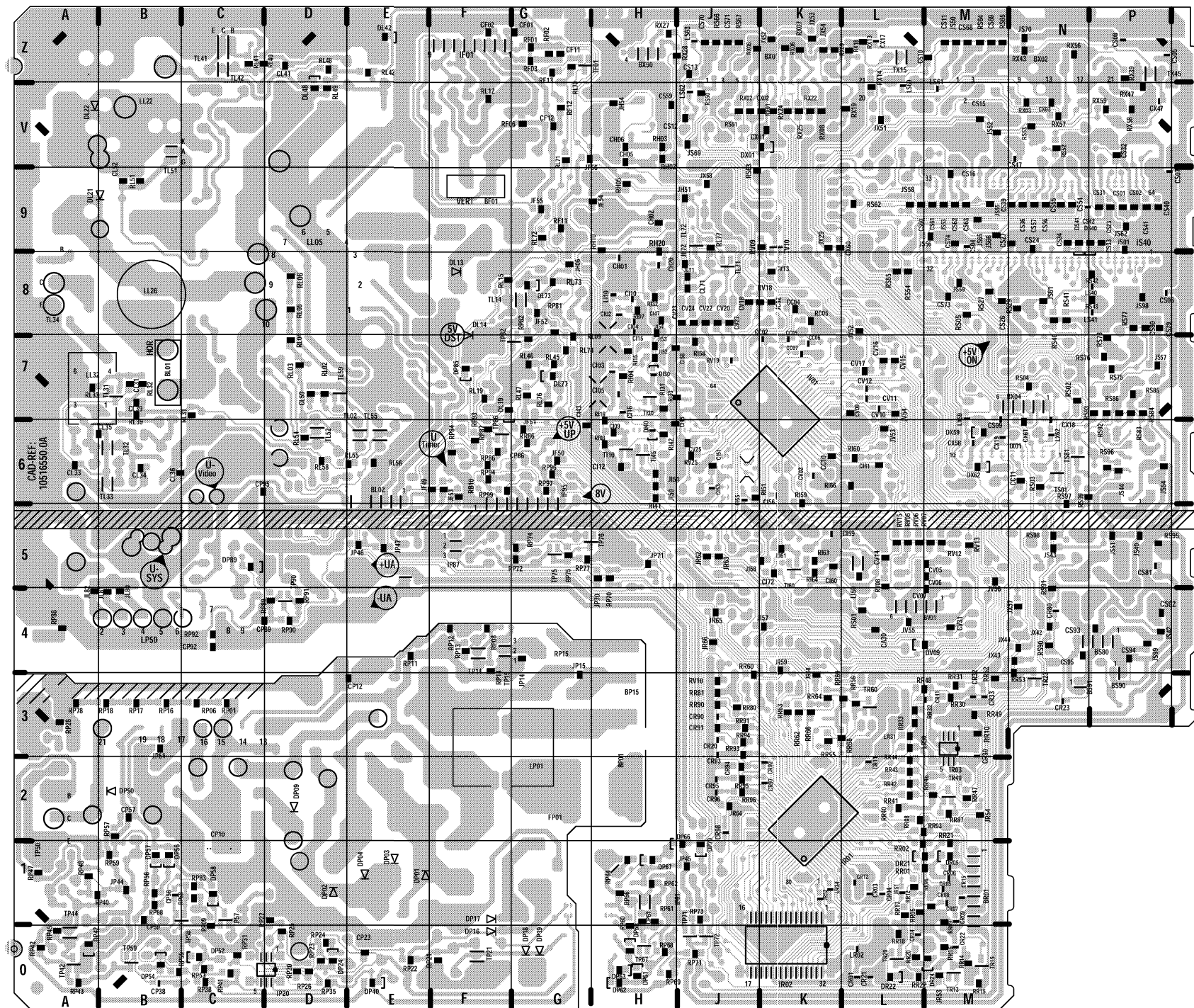


SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS









## PARTS LIST LISTE PIECES DETACHEES ERSATZTEILLISTE LISTA PARTI DI RICAMBIO LISTA DE PIEZAS DE REPUESTO

## THOMSON

## Chassis ICC17

### MODULES

<b>MAIN</b>	<b>IC17F5RQ02603C</b>	
<b>AVL</b>	<b>SUBAVL17000</b>	<b>R 10614890</b>
<b>CRT</b>	<b>CRT17700 (PCB HYB 02)</b>	<b>R 10651940</b>
<b>FCB</b>	<b>FCB1701</b>	<b>R 25313060</b>
<b>KDB</b>	<b>KDB1706</b>	<b>R 25388640</b>



<b>GK01</b>	TSOP1333	25358570
<b>IB01</b>	TDA6107Q/N2	10659660
<b>IF01</b>	TDA8351	20753830
<b>IP20</b>	TS3702CD FLAT	10537330
<b>IP50</b>	TLP621 GR(D4-LF2 T)	△ 20827900
<b>IP61</b>	TL431ACZ	10538830
<b>IP87</b>	MC7812/CT	46007600
<b>IP95</b>	TDA8139	10044580
<b>IR01</b>	ST92R195 CUT 2.2 FLAT	10588150
<b>IR02</b>	IC-ROM THOMSON V3.20-0	1059455E
<b>IR03</b>	M24C16MN6 FLAT	25348520
<b>IS40</b>	MSP3410D-PP-B3/B4	10510320
<b>IS80</b>	TDA7269	10348790
<b>IV01</b>	TDA8855H FLAT	10533960
<b>IX01</b>	BA7604N	10539590
<b>ZL11</b>	MP25	△ 10500150
<b>ZL13</b>	MP63	△ 10472270



<b>TB01,TL52,TP21</b>	BF423	16003110
<b>TB02,TL02,55</b>	BF422	16003090
<b>TF01,TI60,TL31,TP58,59,67,71,76,90,TR60,TS01,81,TV10</b>	BC846B SMD	16006260
<b>TI10,30,45</b>	DTC144EK SMD	16007030
<b>TL14</b>	2SC2236Y	16000220
<b>TL32</b>	BC337-40	45001466
<b>TL33</b>	MPS750	16001340
<b>TL34,TP50</b>	BUH516TH16	10401110
<b>TL41</b>	BD241C	16001880

<b>TL42,TP14, TX15,45</b>	BC546B	45001866
<b>TL51</b>	THYHIPWR	10576770
<b>TL59,TP42,86, TR15</b>	BC856B SMD	16006310
<b>TL71</b>	BC847C SMD	90618810
<b>TL72</b>	RN1401 SMD	10966100
<b>TP15</b>	BTB06-600C	10259910
<b>TP44</b>	2SA1020Y	16003740
<b>TP57</b>	RN2417 SMD	25423180
<b>TP72,TR20</b>	DTC113ZK SMD	10550750
<b>TP75,82</b>	BCR191 SMD	16006910
<b>TP77</b>	RN1409 SMD	20688820
<b>TR13,23,40</b>	BCR141 SMD	16006890
<b>TX80,81,85,86, 88</b>	BC847B SMD	11070770



<b>DB04,DP16,17, 18,19</b>	1N4004	44009009
<b>DB05</b>	1.5KE250A	25353360
<b>DB30,31,50,51, 70,71,DJ20, DL31</b>	BAV21	44044407
<b>DE01</b>	BZX55C2V7	80444120
<b>DH01</b>	BZX55B33	80442730
<b>DH04,DL12,32, 33,72,74,75, DP53,DR20,23, DV19</b>	1N4148	44009209
<b>DI30,40</b>	BA782S	20542050
<b>DJ20,DL48, DX59</b>	BAV103 SMD	10155030
<b>DK01,DL09, DP72</b>	BZX55B5V1/ZPD5V1 2%	44035702
<b>DL11,24,25,41, DP12,41,46,47, 48</b>	RG10G	10459090
<b>DL13</b>	FUF5402	10458530
<b>DL14</b>	RG15G	10272800
<b>DL19,73,77, DP24,39,40,42, 52,54,56,57, 58,60,61,62, 63,67,70,85, 89,DR21,22,24, DV09</b>	LL4148 SMD	16012450
<b>DL21</b>	BY228	16008370

<b>DL22</b>	BYW76	16009120
<b>DL42</b>	ZMM5,1 SMD	70446740
<b>DL51</b>	RG10M	10455320
<b>DL71</b>	BZX55C20	30948810
<b>DP01,02,03,04</b>	BYW27-1000	10455390
<b>DP06</b>	BZW04-342	25354340
<b>DP14</b>	BZX55C3V3	30948790
<b>DP20</b>	ZPD51/BZX55C51/BZX79C51	90578110
<b>DP21</b>	BZX85C39	80444000
<b>DP22</b>	BZX55C6V8	50890650
<b>DP43,45,50,87</b>	RG102-20	10472330
<b>DP44</b>	BZX55C3V9	80444130
<b>DP59</b>	BZX55C18	11073680
<b>DP80</b>	MUR460	16009650
<b>DP82</b>	FUF4005/MUR160	16009580
<b>DP83</b>	BAT42	16007410
<b>DP84</b>	MUR120	10564670
<b>DP93</b>	MUR420	16009630
<b>DP94</b>	BZX55C13	70438310
<b>DR05</b>	LL42 SMD	16012530
<b>DS90</b>	BZX55C3V6	50890640
<b>DX86</b>	BAS20 SMD	16012250
<b>DX87</b>	BZX84B8V2 SMD	25385640
<b>GE01</b>	TLUV5300 LED	11137650



<b>FI10</b>	OFWK6282K FOS	10648840
<b>FI20</b>	OFWK9650M FOS	10545440
<b>FI50</b>	5M74HZ	20338170
<b>QC01</b>	4M433619HZ	10087710
<b>QC02</b>	3M579545HZ	10542190
<b>QR01</b>	4M0HZ	10254300
<b>QS40</b>	18M432HZ	10334670



<b>FI01</b>	40M4HZ	20300950
<b>FI02</b>	31M9HZ	10552630
<b>FI30</b>	77M8HZ	10559760
<b>LL22</b>		10636390

R : RECYCLED PART  
: PIECE RECYCLEE  
: AUSTAUSCHTEILE  
: RICAMBIO RICICLATO  
: MODULO REPROCESADO

For any requests, please contact THOMSON multimedia after sales service area  
Pour toutes précisions, contactez votre service apres vente local THOMSON multimedia  
Für weitere Auskünfte, wenden Sie sich bitte an die THOMSON multimedia Kundendienst  
Per precisazioni, contattare l'assistenza tecnica THOMSON multimedia  
Para cualquier pregunta, por favor contactar con el responsable de zona del servicio postventa de THOMSON multimedia

01 / 2000 35105110  
REV. N° 0 00 / 00 00000000  
1/3



PP64	1K0 OHM	70434550
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RB01,04	1K5 OHM 5% 0,50W	10121880
RB06	220R0 OHM 5% 0,25W	△ 15009810
RB31,51,71	560R0 OHM 10% 0,50W	10257590
RC02	1R0 OHM 5% 0,40W	△ 13060910
RF05	1R21 OHM 1% 0,70W	13010820
RF07	220R0 OHM 1% 0,70W	10233720
RF08	68R0 OHM 5% 0,70W	15009050
RL01	45K3 OHM 1% 0,25W	15018160
RL07	6K19 OHM 1% 0,40W	15020490
RL13	0R27 OHM 5% 2,50W	10263600
RL35,RS87,88	4R7 OHM 5% 0,35W	△ 10226310
RL36,RP10	2R2 OHM 5% 0,25W	△ 15009870
RL43	68K1 OHM 1% 0,70W	10147740
RL44	1R0 OHM 5% 0,50W	△ 10576360
RP04	2R7 OHM 5% 4,50W	10379110
RP15	18R0 OHM 220V PTC	△ 41398800
RP39,52,54,95, RR45,RV03,14, 30,31	100R0 OHM 5% 0,25W	30943330
RP49	0R47 OHM 5% 2,5W	△ 25339900
RP50	10M0 OHM 5% 0,70W	△ 10074320
RP63	432K0 OHM 1% 0,13W	10354720
RS12	18R0 OHM 5% 0,30W	△ 15009660
RV20	100K0 OHM 1% 0,25W	50883810
RX17	10R0 OHM 5% 0,25W	△ 15009580



CB01	10N0F 3K0V	14036450
CL08	10N0F 5% 400V	14035870
CL12,15,55, CP18,21,42,85, 94	330P0F 20% 1K0V	14035270
CL21	15N0F 3.5% 1K6V	10643660
CL22	27N0F 5% 400V	10263540
CL24	440N0F 5% 250V	△ 10525280
CL51	290N0F 5% 250V	10378450
CP01	100N0F 20% 275V	△ 10331520
CP03,04	4N7F 1K0V	10058740
CP05	1N5F 10% 1K0V	20338740
CP10	150U0F 385V	43424800
CP11	10N0F 10% 400V	15001080
CP16,17	470N0F 20% 275V	△ 10596570
CP20	220P0F 10% 400V	14033000
CP49	3N3F 20% 1K6V	10607950
CP50	1N0F 20% 400V	△ 43106800
CP51	150P0F 20% 400V	△ 20738090
CP81	1N0F 10% 500V	10546570
CP83	100P0F 20% 1K0V	14035280



LL05	DSTTDS29	△ 10608670
LL26		△ 10526140
LL32	DRIVER	10518110
LP01		△ 10261530
LP20	DRIVER	△ 10554410
LP44	DRIVER	10561800
LP50	SMT41	△ 10537860

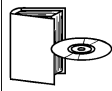
## OTHER PARTS AUTRES PIECES SONSTIGE TEILE ALTRE PARTI OTRAS PIEZAS

BB05	CATHODE RAY TUBE SOCKET SUPPORT TUBE CATHODIQUE BILDROEHRENFASSUNG SUPPORTO TUBO CATODICO SOPORTE T.R.C	△ 80298800
BJ10	CINCH SOCKET PRISE CINCH CINCH-BUCHSE PRESA CINCH TOMA CINCH	10037440
BJ11	SVHS SOCKET PRISE SVHS S-VHS-BUCHSE PRESA SVHS TOMA SVHS	20392900
BQ12	JACK SOCKET PRISE JACK BUCHSE PRESA JACK TOMA JACK	10539510
BX01,02	SCART SOCKET PRISE PERITEL EURO-AV-BUCHSE EUROPRESA NORMALIZZATA EUROCONNECTOR	90617260
CH200	ON/OFF SWITCH CONTACTEUR MARCHE/ARRET EIN-AUS SCHALTER CONTATTORE ACCESO/SPENTO CONTACTOR MARCHA/PARADA	△ 10276500
FP01	2A5T TIME-LAG FUSE 2A5T FUSIBLE TEMPORISE 2A5T THERMISCHE SICHERUNG 2A5T FUSIBILE TEMPORIZZATO 2A5T FUSIBLE TEMPORIZADO	△ 10246750
NH01	CTT5010 UHF/VHF TUNER CTT5010 TETE UHF/VHF CTT5010 UHF/VHF TUNER CTT5010 TUNER UHF/VHF CTT5010 SINTONIZADOR UHF/VHF	20812280
SK01,02,03,04	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR	30011100

## EQUIPMENT/PRESENTATION EQUIPEMENT/PRESENTATION AUSSTATTUNG/GEHAEUSE PARTI VARIE EQUIPO/PRESENTACION

FRONT PANEL FACADE FRONTPLATTE PANNELLO FRONTALE PANEL FRONTAL	25346170
REAR PANEL DOS RUECKWAND PANNELLO POSTERIORE TAPA POSTERIOR	△ 25433840
INFRARED WINDOW GLACE INFRAROUGE INFRAROT FENSTER VETRO INFRAROSSO CRISTAL INFRARROJO	25373830
LOGO THOMSON LOGO THOMSON SCHRIFTZUG THOMSON MARCHIO THOMSON LOGOTIPO THOMSON	25367520
CHASSIS SUPPORT SUPPORT CHASSIS CHASSIS HALTER SUPPORTO CHASSIS SOPORTE CHASSIS	25296750
COVER JACK SOCKET CACHE PRISE JACK ABDECKUNG BUCHSE COPERCHIO PRESA JACK CUBIERTA TOMA JACK	25298150
8R OHM 15W LOUDSPEAKER 60X125 8R OHM 15W HAUT PARLEUR 60X125 8R OHM 15W LAUTSPRECHER 60X125 8R OHM 15W ALTOPARLANTE 60X125 8R OHM 15W ALTAVOZ 60X125	10467060
ON/OFF BUTTON TOUCHE MARCHE/ARRET EIN-AUS TASTE TASTO ACCESO/SPENTO TECLA MARCHA/PARADA	25309090
BUTTON ASSY ENSEMBLE DE TOUCHES TASTENEINHEIT ASSIEME TASTI CONJUNTO DE TECLAS	25312630
POWER SUPPLY LEAD CORDON D'ALIMENTATION NETZKABEL CAVO DI ALIMENTAZIONE CABLE DE ALIMENTACION	△ 10260880
W66EJU023X015 CATHODE RAY TUBE W66EJU023X015 TUBE CATHODIQUE W66EJU023X015 FARBBILDROEHRE W66EJU023X015 TUBO CATODICO W66EJU023X015 T.R.C	△ 10647170
DEGAUSSING COIL BOBINE DE DEMAGNETISATION ENTMAGNETISIERUNGSSPULE BOBINA DI SMAGNETIZZAZIONE BOBINA DE DESMANTACION	△ 47320181
RCTMB100 REMOTE CONTROL RCTMB100 TELECOMMANDE RCTMB100 FERNBEDIENUNG RCTMB100 TELECOMANDO RCTMB100 TELEMANDO	20879230
FOLDING BOX EMBALLAGE CARTON KARTON IMBALLAGGIO CARTONE EMBALAJE CARTON	25443870

FITTING DOWNER 25348810  
CALE INFERIEURE  
POLSTER UNTEN  
DISTANZIATORE INFERIORE  
CALZO INFERIOR  
FITTING UPPER 25348820  
CALE SUPERIEURE  
POLSTER OBEN  
DISTANZIATORE SUPERIORE  
CALZO SUPERIOR



28WN22E PARTS LIST 35105110  
28WN22E LISTE DE PIECES DETACHEES  
28WN22E ERSATZTEILLISTE  
28WN22E LISTA PARTI DI RICAMBIO  
28WN22E LISTA DE PIEZAS DE REPUESTO  
ICC17 SERVICE MANUAL EUROPE 35063330  
ICC17 DOC TECHNIQUE EUROPE  
ICC17 TECHNISCHE DOKUMENTATION EUROPE  
ICC17 DOCUMENTAZIONE TECNICA EUROPE  
ICC17 DOCUMENTACION TECNICA EUROPE  
28WN22E UM TH D/F/I/E/GB/NL/S/DK/PL/GR 25390150  
28WN22E NU TH D/F/I/E/GB/NL/S/DK/PL/GR  
28WN22E BA TH D/F/I/E/GB/NL/S/DK/PL/GR  
28WN22E IU TH D/F/I/E/GB/NL/S/DK/PL/GR  
28WN22E IU TH D/F/I/E/GB/NL/S/DK/PL/GR  
ICC17 UPDATING N°01 35080950  
ICC17 MISE A JOUR N°01  
ICC17 ERGAENZUNG N°01  
ICC17 AGGIORNAMENTO N°01  
ICC17 ACTUALIZACION N°01  
CDROM ICC17 35065140  
CDROM ICC17  
CDROM ICC17  
CDROM ICC17  
CDROM ICC17

28WN22E

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## LES PROGRAMMES

LA FORMATION PARATECHNIQUE

LES PRODUITS HIGH TECH

FORMATION VENDEURS

MICRO INFORMATIQUE

JOURNÉES FORMATION SERVICE

MAINTENANCE 1<sup>er</sup> DEGRÉ D'INTERVENTION

LES STAGES TECHNIQUES

- Techniques vidéo
- Techniques Télévision

NOS COORDONNÉES

RÉSUMÉS DE COURS

CASSETTES D'AIDE À LA MAINTENANCE

BULLETIN D'INSCRIPTION

ACCÈS À NOS LOCAUX

HOTELS

QUITTER

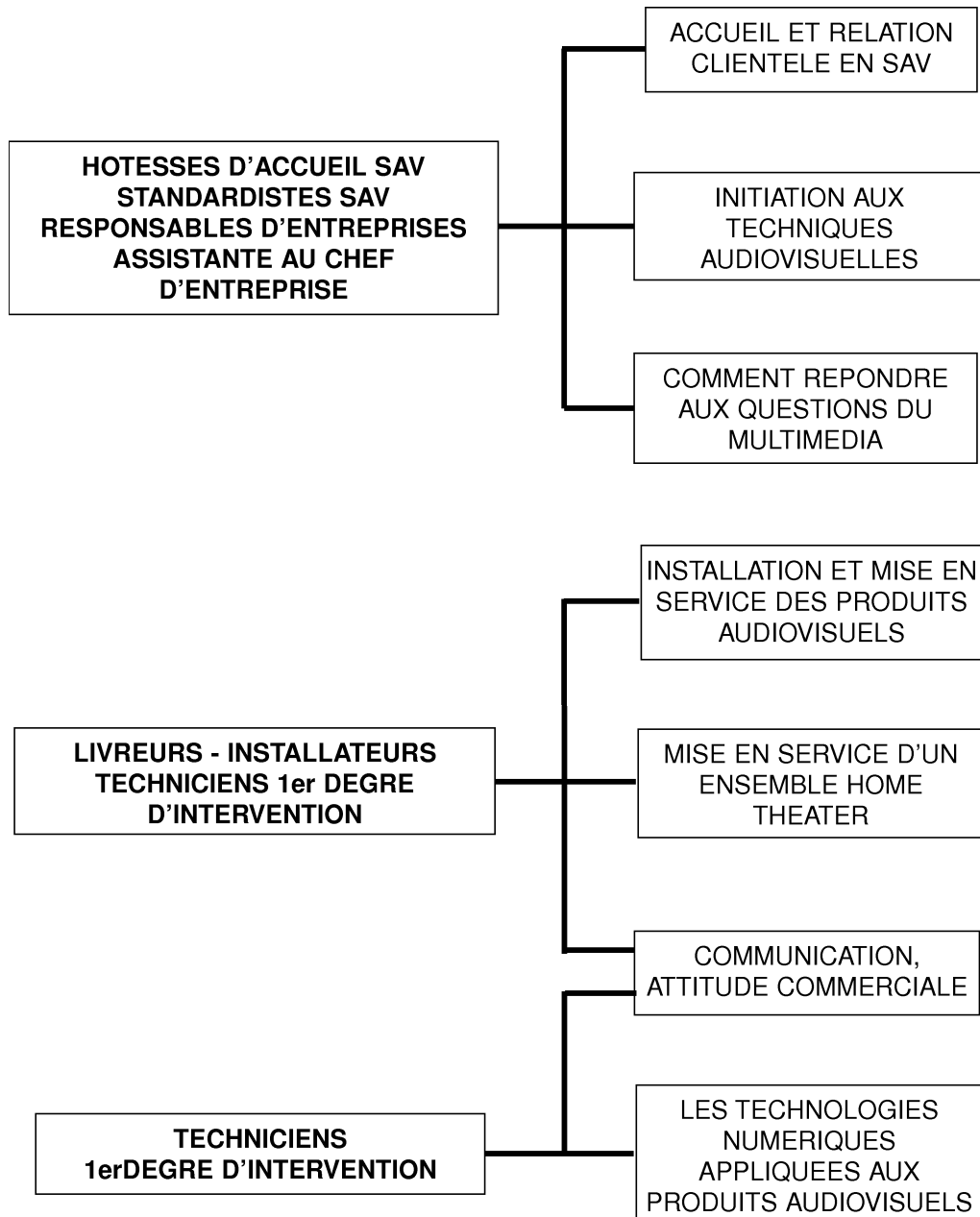
# THOMSON MULTI MEDIA



## CENTRE DE FORMATION THOMSON multimedia

# 2000

# LA CHAÎNE du SERVICE



# LES PRODUITS HIGH TECH

RESPONSABLES D'ENTREPRISES  
DIRECTEURS SAV  
TECHNICIENS 1<sup>er</sup> DEGRE D'INTERVENTION  
TECHNICIENS D'ATELIER

LA TECHNOLOGIE DES  
ECRANS PLASMA

LA TECHNOLOGIE DES  
LECTEURS DE DISQUES  
NUMERIQUES DVD

LES LECTEURS AUDIO  
FORMAT MP3

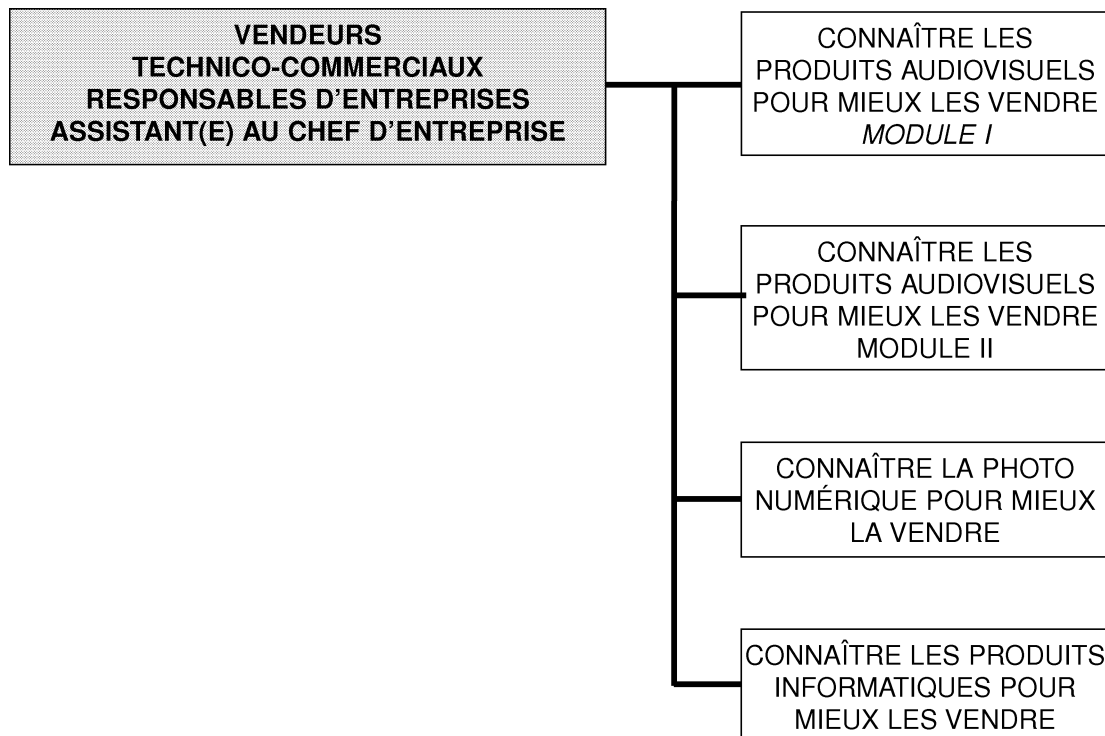
LES CAMESCOPES  
NUMERIQUES DVCR

LE HOME THEATER

LES TECHNOLOGIES EGP  
A L'ERE DE  
L'INTERACTIVITE



# LES FORMATIONS VENDEURS



# MICRO INFORMATIQUE

## MAINTENANCE

CONFIGURATION ET  
MAINTENANCE DES PC

INSTALLATION DE  
PÉRIPHÉRIQUES MULTIMEDIA  
ET RÉSEAUX

## SYSTEME D'EXPLOITATION

WINDOWS 98 AVANCÉ -  
LINUX

## INTERNET

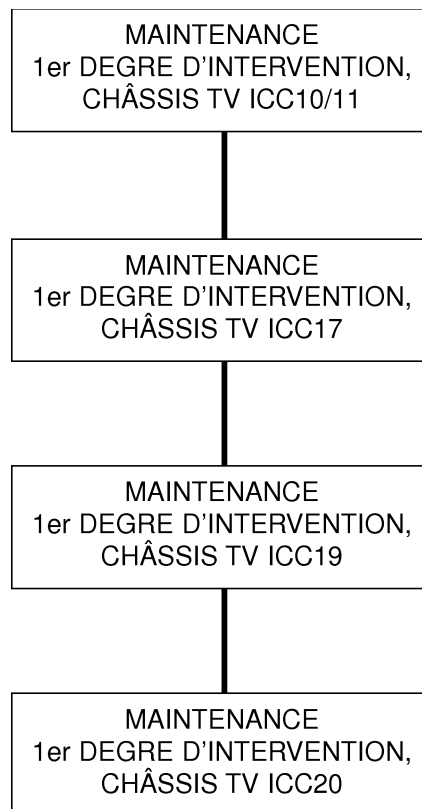
INITIATION A INTERNET -  
CRÉATION DE  
SITE WEB

# LES JOURNÉES FORMATION SERVICE

ASSISTANCE A LA  
MAINTENANCE, CHÂSSIS  
VIDEO R4000 / R5000

ASSISTANCE A LA  
MAINTENANCE, CHÂSSIS TV  
ICC9

ASSISTANCE A LA  
MAINTENANCE, CHÂSSIS TV  
TX91-91G / TX92-92F

**MAINTENANCE*****1er degré* D'INTERVENTION**

# LES TECHNIQUES VIDÉO

## LECTEURS DVD

PRINCIPE ET MAINTENANCE  
DES LECTEURS DVD  
DTH 1000/2000/2500

PRINCIPE ET MAINTENANCE  
DES LECTEURS DVD  
DTH 3300/3600/3700

## MAGNÉTOSCOPES

PRINCIPE ET MAINTENANCE  
DES MAGNÉTOSCOPES VHS

ETUDE APPLIQUÉE DES  
MAGNÉTOSCOPES,  
CHÂSSIS R6000 ET R7000

ETUDE APPLIQUÉE DES  
MAGNÉTOSCOPES,  
CHÂSSIS R8000

ETUDE APPLIQUÉE DES  
MAGNÉTOSCOPES,  
CHÂSSIS R9000

EVOLUTION DES CHÂSSIS  
R7000  
DÉPANNAGE DIRIGÉ DES  
CHÂSSIS R6000/R7000

## CAMESCOPIES

LES BASES  
DES CAMESCOPIES  
FORMAT VHS-C ET VIDÉO 8

LA MAINTENANCE DES  
CAMESCOPIES VHS-C,  
CHÂSSIS M10, M11 ET M12

LA MAINTENANCE DES  
CAMESCOPIES DV, CHÂSSIS  
VMD2, VMD3 ET VMD8

# LES TECHNIQUES TÉLÉVISION

